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COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

SUPERIOR COURT
CIVIL ACTION NO. 19-3333
JUDGE JOSEPH DONOVAN
CLERK/MAGISTRATE

COMMONWEALTH OF MASSACHUSETTS,

Plaintiff,

v.

EXXON MOBIL CORPORATION,

Defendant.

COMPLAINT

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I. INTRODUCTION

1. For many years, Exxon Mobil Corporation (“ExxonMobil” or the “Company”), the world’s largest publicly traded oil and gas company, systematically and intentionally has misled Massachusetts investors and consumers about climate change. In order to increase its short-term profits, stock price, and access to capital, ExxonMobil has been dishonest with investors about the material climate-driven risks to its business and with consumers about how its fossil fuel products cause climate change—all in violation of Massachusetts law.

2. The Commonwealth of Massachusetts (“Commonwealth”), through its Attorney General, brings this action pursuant to the Massachusetts Consumer Protection Act, G.L. c. 93A, §§ 1-11 (“Chapter 93A”) and related regulations, to hold ExxonMobil accountable for misleading the state’s investors and consumers. ExxonMobil’s Chapter 93A violations have taken the form of both significant factual misstatements and the failure to make disclosures to investors and consumers that would have been material to decisions by Massachusetts investors to purchase, sell, retain, and price ExxonMobil securities and by Massachusetts consumers to purchase ExxonMobil fossil fuel products that cause climate change.

3. ExxonMobil’s pattern of deception came to light through a series of media articles in 2015. After the Attorney General’s Office served ExxonMobil with a civil investigative demand regarding the matters raised by the articles, ExxonMobil sued the Attorney General in both this Court and a non-Massachusetts federal court to prevent her from obtaining documents from the Company. This Court, and later the Supreme Judicial Court, upheld the Attorney General’s authority to investigate the matter,¹ and the U.S. Supreme Court denied ExxonMobil’s

¹ *Exxon Mobil Corp. v. Attorney General*, 479 Mass. 312 (2018).

certiorari petition for review of that decision.² A federal district court summarily dismissed ExxonMobil’s federal action, and ExxonMobil has appealed that decision.³ For more than three years, ExxonMobil has refused to comply with the Attorney General’s demand for documents, but her investigation proceeded.

4. As set forth in more detail below, internal ExxonMobil and other documents made public by the media and/or obtained during the course of the Attorney General’s investigation reveal a systematic effort by the Company, reminiscent of the tobacco industry’s long denial campaign about the dangerous effects of cigarettes, to mislead both investors and consumers in Massachusetts.

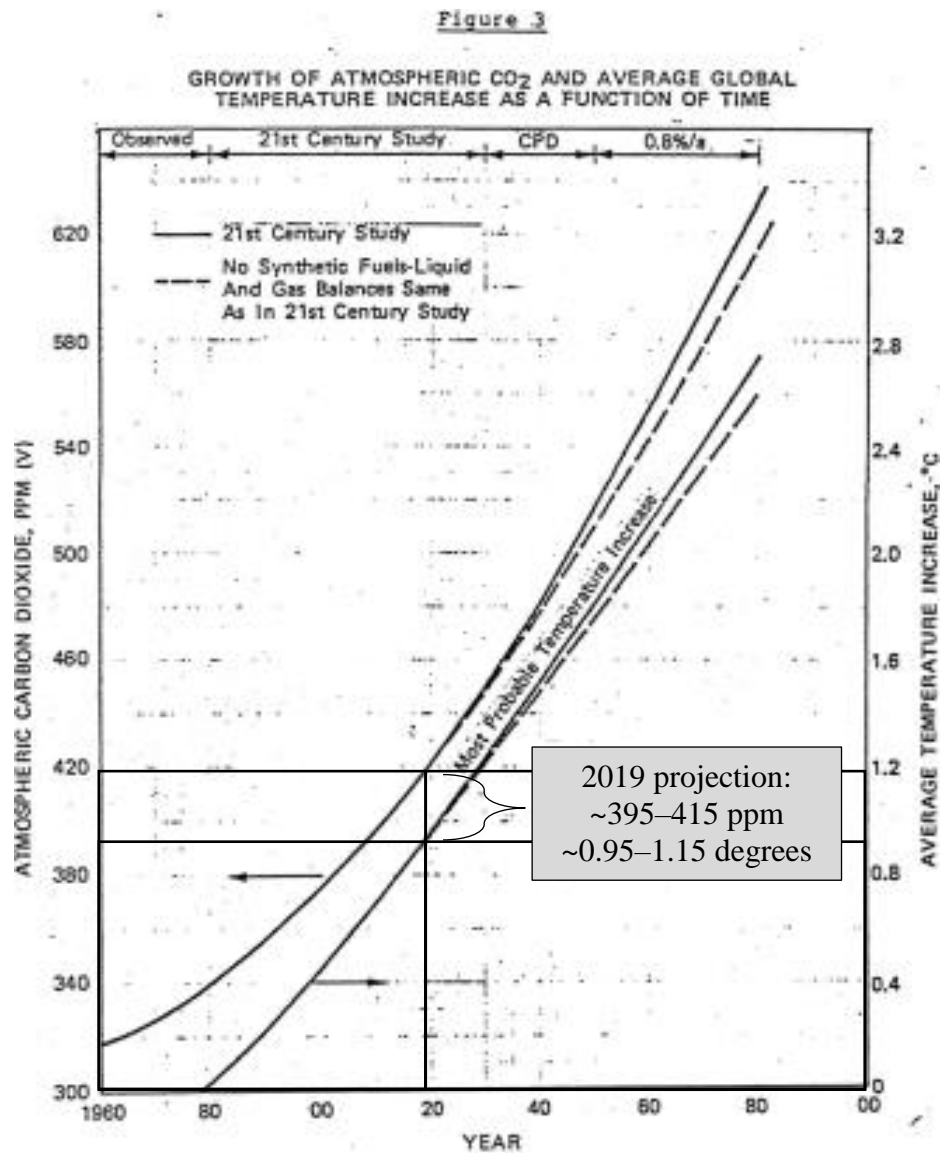
5. Decades ago, ExxonMobil’s predecessor company, Exxon Corporation (“Exxon”), brought the power and expertise of its sophisticated research and engineering division to the issue of climate change, so that it could gain a better understanding of the climate-related risks to its business. Exxon’s scientific experts were among the earliest to understand the risks posed by increasing greenhouse gas emissions, also known as GHG emissions, which include emissions of carbon dioxide (“CO₂”), methane, nitrous oxide, and fluoridated gases. From the late 1970s onward, Exxon scientists and management knew that Exxon’s oil (including petroleum), natural gas, and related hydrocarbon products (together, “fossil fuels”) were the leading cause of climate change, and that climate change, if unabated, would have potentially “catastrophic”—as one Exxon scientist put it thirty-seven years ago—impacts on the global environment and human communities.

² 2019 WL 113105, 586 U.S. __ (Jan. 7, 2019).

³ *Exxon Mobil Corp. v. Schneiderman*, 316 F. Supp. 3d 679 (S.D.N.Y. 2018), *appeal pending sub nom.*, *Exxon Mobil Corp. v. Healey*, No. 18-1170 (2d Cir.).

6. On May 11, 2019, concentrations of carbon dioxide in the atmosphere surpassed 415 parts per million, the highest level in three million years: in other words, the highest level in human history.

7. Exxon's scientists predicted this very result thirty-seven years ago, as depicted in this 1982 Exxon Vu-graph chart, which shows atmospheric carbon dioxide reaching near 415 parts per million (ppm) in 2019 (legend added):



8. The astonishing accuracy of Exxon's prediction demonstrates that Exxon understood the likely rate of acceleration of atmospheric carbon dioxide concentration—and the concomitant impact on global average temperatures—if nothing was done to reduce greenhouse gas emissions.

9. As early as 1978, Exxon confirmed that there was general scientific agreement that humankind was influencing the global climate through carbon dioxide released from burning fossil fuels, and Exxon recognized an urgent need to assess the possible impact of what it referred to as the “greenhouse effect” on Exxon's business. Similarly, in 1979, Exxon recognized that the rate of carbon dioxide increase meant there was a limited window before decisions would need to be made regarding necessary changes in energy strategy to shift away from fossil fuels. At that time, Exxon concluded that, if it became necessary to avoid increasing existing atmospheric carbon dioxide levels to prevent significant climate change, dramatic changes in global patterns of energy use, including the world's demand for the Company's fossil fuel products, would be required.

10. In 1980, an expert retained by Exxon and the U.S. oil industry's trade organization advised them that (i) global average temperatures were expected to rise 2.5 degrees Celsius (“C”) (4.5 degrees Fahrenheit (“F”)) by 2038, and that such a change would have “major economic consequences,” “bring[ing] world economic growth to a halt,” and (ii) by 2067, temperatures would increase by 5 degrees C (9 degrees F), if emissions continued unabated, a change that would have “globally catastrophic effects.” Exxon understood that, if actions to address climate change were delayed until the effects of climate change were discernable, then it was likely that such actions would occur too late to be effective.

11. Equally significant, Exxon recognized that there were a limited number of options for reducing the build-up of atmospheric carbon dioxide, and that measures such as energy conservation and shifting to renewable sources represented the only reasonably viable options. An Exxon scientist advised management in 1981 that it was “distinctly possible” that, over the long term, climate change will “produce effects which will indeed be catastrophic (at least for a substantial fraction of the earth’s population).” Exxon’s scientists also told management that climate change could be “[m]itigat[ed]” by sharply reducing fossil fuel use.

12. Despite its knowledge that continued high rates of fossil fuel combustion would disrupt systems necessary for human survival, including the global water distribution balance, agriculture, and fisheries, ExxonMobil engaged in a decades-long, intentional, tobacco-industry style effort to deceive investors and consumers, including Massachusetts investors and consumers, by sowing doubt about the very climate science Exxon itself had helped to develop and by advertising alleged environmental benefits—not the risks—associated with normal use of its fossil fuel products.

13. By the late 1980s, Exxon made a strategic decision to emphasize uncertainty in climate science to deflect increasing pressures to rein in fossil fuel use. With that decision, Exxon began to lead a multi-million dollar, extremely successful consumer deception campaign, repeatedly taking public positions, either directly or through paid proxies, that contradicted the climate science Exxon itself had helped to develop. As a focal point of its strategy, Exxon and additional corporations and trade groups representing the oil, coal, and automobile industries formed the Global Climate Coalition. ExxonMobil’s other corporate predecessor, Mobil Oil Corporation (“Mobil”), was also a member. The Global Climate Coalition launched an aggressive public relations effort aimed at duping the public into believing that, contrary to

Exxon's internal scientific knowledge, the role of greenhouse gases in climate change was not well understood.

14. Exxon and Mobil made multiple statements to investors and consumers that sought to undermine climate science and that conflicted with their own internal knowledge. For example, in 1996, Exxon published "*Global warming: who's right? Facts about a debate that's turned up more questions than answers.*" In speeches and publications, Exxon's then-Chief Executive Officer ("CEO"), Lee Raymond, represented that "[c]urrently, the scientific evidence is inconclusive as to whether human activities are having a significant effect on the global climate," referred to the fact that fossil fuel combustion causes climate change as an "unproven theory," and urged opposition to efforts to reduce fossil fuel consumption and support for expansion of efforts to develop fossil fuels. In 1997, Mr. Raymond represented in a speech that "the case for so called global warming is far from air tight," and "[i]t is highly unlikely that the temperature in the middle of the next century will be significantly affected whether policies are enacted now or 20 years from now."

15. In 1998, Exxon, with the oil industry's trade organization, founded the "Global Climate Science Communications Team," a group formed for the express purpose of causing the public and policymakers to doubt the science of climate change. Exxon and its collaborators laid out in the Global Climate Science Communications Plan the criteria by which they would know when their efforts to sow doubt had been successful. "Victory," they wrote, "will be achieved when average citizens 'understand' (recognize) uncertainties in climate science," and "recognition of uncertainty becomes part of the 'conventional wisdom.'" Exxon published "*Global Climate Change: Everyone's debate,*" that tracked almost verbatim the strategies set forth in the Global Climate Science Communications Plan. The report asked, "Does the tiny

portion of greenhouse gases caused by burning fossil fuels have a measurable effect on worldwide climate? No one knows for sure.”

16. While Exxon, Mobil, and the front groups they funded led the attack on climate science, noted scientific bodies issued increasingly urgent warnings about the dire consequences that will result if greenhouse gas emissions are not substantially curtailed. Consistent with Exxon’s prior, undisclosed research, the International Energy Agency and others concluded that, to limit warming to a safer level, the world must shift away from reliance on fossil fuels. Specifically, in 2012, the International Energy Agency warned that two-thirds of the world’s proven fossil fuel reserves must remain unburned if humanity is to avert catastrophic climate change.

17. Having engaged in decades of deceiving the world about climate change to evade full recognition of the science’s ramifications for the Company’s business model, ExxonMobil’s pattern of deception continues today through several interrelated unlawful efforts to mislead investors and consumers, including Massachusetts investors and consumers, about climate change risks. It is these efforts over the last decade that give rise to ExxonMobil’s violations of Chapter 93A alleged in this Complaint. Collectively, as with its historic and ongoing deception campaigns about the science, the objective of ExxonMobil’s efforts is to preserve the Company’s short-term profits in a carbon-dominated world economy, no matter the dire long-term consequences for the Company’s investors or for the consumers who buy its products.

18. In its communications with investors, including the Company’s supposed disclosures about climate change, now and in recent years ExxonMobil has failed to disclose the full extent of the risks of climate change to the world’s people and economies, the fossil fuel industry, and the Company. In some cases, ExxonMobil has denied or misleadingly downplayed

those risks. Through these misrepresentations, ExxonMobil has deceptively sought to overstate the value and sustainability of its business and is continuing to do so.

19. ExxonMobil now tells investors all the time that climate change risks are a management priority for the Company. And yet, ExxonMobil deceptively disseminates long-term forecasts of future growth in demand for fossil fuels. In light of these forecasts, the Company asserts to investors that virtually none of its fossil fuel assets are at risk during the global transition to cleaner energy that is now underway.

20. In these and other assurances, ExxonMobil wholly ignores, and fails to disclose to investors, the catastrophic risks that climate change presents to its business and to global economic and social systems—including unprecedented human migrations, resource scarcity, wealth destruction, armed conflict, and escalating human suffering—which have been internally apparent to the Company for more than forty years.

21. In the coming decades, these catastrophic “systemic” impacts threaten to impose ruinous societal costs, cascade throughout the world’s economies, and decimate the overall value of the world’s financial markets, and with them, ExxonMobil’s global business and the holdings of the Company’s Massachusetts investors.

22. Estimates of climate-related costs are mounting. In 2018, 215 of the world’s largest companies reported a potential financial impact from climate-related risks of almost \$1 trillion. That number does not include ExxonMobil because the Company failed to report any such numbers.

23. Rather than honestly disclose and mitigate climate change risks, ExxonMobil’s misrepresentations about and failures to disclose those risks have delayed the needed transition

to clean energy around the world and make these existential climate-driven threats to the global economy more likely to occur.

24. The magnitude of ExxonMobil's deception with respect to its global fossil fuel demand growth projections is staggering. For example, in its 2018 Outlook for Energy, the Company represented, with oil and gas fueling more than half of global energy demand through 2040, that demand "will continue to rise through 2040 . . . led by the expanding economies in the Asia Pacific region," with "[c]ontinuing urbanization and a significant expansion of the middle class, particularly in China and India."

25. In early June of 2019, the Northern Indian city of Churu reached 122 degrees Fahrenheit. Also in June, the city of Chennai, with a population of nine million, ran out of water; Bangalore, Hyderabad, and Delhi, together home to sixty million, are also facing water scarcity. Climate-driven droughts and changes in the monsoon season are a major contributor to these crises. As financial analysts are now beginning to recognize, emerging economies, like India, may be too stressed by climate change to actually "emerge"—an eventuality that would have not only dire humanitarian impacts, but would sharply decrease demand for ExxonMobil's fossil fuel products, presenting a significant risk to ExxonMobil's business. Despite the fact that ExxonMobil has known for decades that climate change would wreak havoc with global water cycles and cause droughts, nowhere does the Company disclose the potentially enormous impacts of such physical and related societal risks to its business.

26. In service of the same effort to deceive the Company's investors regarding the catastrophic risks of climate change, ExxonMobil also has deceived investors with misleading statements about how it incorporated climate change risks into its financial and business planning.

27. In particular, ExxonMobil faced, and continues to face, serious risks that its fossil fuel businesses were and remain poorly positioned for governmental and other measures that would limit greenhouse gas emissions, therefore reducing demand for its fossil fuel products. Chief among those risks for ExxonMobil and its shareholders is the risk that the Company's most important assets—its oil and gas reserves—will become “stranded,” i.e., rendered economically incapable of being developed because of governmental limits on emissions and other measures that increase the cost of developing fossil fuel reserves and shift demand away from fossil fuels. When those reserves cease to have future value, other things being equal, ExxonMobil securities are likely to decline in value as well, perhaps dramatically, much as the market value of coal companies has collapsed in recent years as the deployment of cleaner, more efficient fuel sources has reduced expected future coal demand.

28. ExxonMobil assured its Massachusetts and other investors that it had accounted for such risk by building into its business planning what is known as a proxy cost of carbon, which accounts for the likelihood of increasing costs from policies that will tax or regulate greenhouse gas emissions from ExxonMobil's operations and fossil fuel products. These investors have included Massachusetts-based ExxonMobil shareholders, such as State Street Corporation, Wellington Management Group, Fidelity Investments, Boston Trust Walden Company (formerly known as both Boston Trust & Investment Management Company and Walden Asset Management), and Arjuna Capital.

29. ExxonMobil repeatedly and expressly has represented in writing and orally and otherwise implied to Massachusetts investors—including in reports specifically prepared by ExxonMobil to address these investors' concerns about climate-driven risks to ExxonMobil's business—that it applied an escalating proxy cost of carbon in its business planning, investment

decisions, oil and gas reserve assessment, impairment analyses, and projections of future oil and gas demand. ExxonMobil has claimed that, notwithstanding the additional anticipated costs it expected to incur as a result of increased efforts to reduce greenhouse gas emissions, its businesses would continue to meet growing demand for fossil fuel energy around the world and its reserves were not at risk of becoming stranded.

30. ExxonMobil did not, in fact, apply the proxy cost of carbon internally in the amounts or manner it represented, and in some cases at all. In planning oil and gas projects and in calculating its oil and gas reserves, ExxonMobil has variously:

- i) applied a lower, undisclosed proxy cost based on internal guidance;
- ii) applied even lower costs based on existing regulations and held those costs flat for decades into the future, in lieu of applying an escalating proxy cost; or
- iii) applied no cost associated with greenhouse gas emissions at all.

ExxonMobil also directly or indirectly misrepresented its use of proxy costs in its impairment analyses for its marginally economic assets and its projections of future oil and gas demand.

31. Thus, while its internal practices applied proxy costs unevenly, if at all, ExxonMobil has portrayed itself to investors as conservative in its approach, asserting that it has incorporated the climate change financial risk to its business by applying a proxy cost that would reduce future cash flows and their volatility, thereby accounting for and mitigating the risk. Because these assurances understated the material risks of climate change to the Company's business, they were material to Massachusetts investors' decisions regarding their holdings of ExxonMobil securities. In this regard, ExxonMobil's misrepresentations falsely justified to investors its riskiest long-term investments, including Canadian bitumen oil sands projects ("oil sands") now comprising more than a quarter of its publicly disclosed global fossil fuel reserves.

32. ExxonMobil's omissions and misrepresentations to investors about the systemic risks of climate change and its use of a proxy cost of carbon are material because disclosure of those risks and the Company's actual practices would influence the decisions of Massachusetts investors to purchase, sell, retain, or price ExxonMobil securities.

33. ExxonMobil's omissions and misrepresentations to investors about the systemic risks of climate change and its use of a proxy cost of carbon have been and are therefore materially false and misleading in violation of Chapter 93A.

34. In its marketing and sales of ExxonMobil products to Massachusetts consumers, ExxonMobil likewise has failed and continues to fail to disclose in its advertisements and promotional materials that the development, refining, and normal consumer use of ExxonMobil fossil fuel products emit large volumes of greenhouse gases, which are causing global average temperatures to rise and destabilizing the global climate system. ExxonMobil has misrepresented and continues to misrepresent the supposed climate and environmental *benefits* of its fossil fuel products—a deceptive marketing tactic that violates Chapter 93A.

35. ExxonMobil's representations in its advertising and promotional materials that consumer use of its Synergy™ and “green” Mobil 1™ products reduces greenhouse gas emissions are highly deceptive, since ExxonMobil fails to disclose the fact that production and consumer use of such transportation fuels is a leading cause of climate change that endangers public health and consumer welfare, and thus any purported environmental benefit associated with the use of those products is illusory.

36. In addition, ExxonMobil's relentless “greenwashing” marketing campaigns target consumers with messaging regarding ExxonMobil's purported environmental stewardship, corporate leadership in the realm of environmental and climate protection, and innovative clean

energy research, while failing to disclose that ExxonMobil is spending little on clean energy development, and instead is secretively opposing actions to reduce greenhouse gas emissions and ramping up production of fossil fuels that cause climate change. ExxonMobil's greenwashing is deceptive because it presents a false picture of ExxonMobil to consumers that is contradicted by ExxonMobil's actions and the massive environmental harms caused by the Company's production, refining, and sales of fossil fuels.

37. ExxonMobil's misleading representations and omissions to consumers are material because disclosure of information that ExxonMobil knows regarding the dangerous climate effects of using ExxonMobil's fossil fuel products would influence the purchasing behavior of Massachusetts consumers.

38. ExxonMobil's misrepresentations and omissions to consumers have been and are therefore materially false and misleading in violation of Chapter 93A and the Attorney General's implementing regulations.

39. The gravity of ExxonMobil's historic and continuing unlawful actions cannot be overstated; the world lost forty critical years to develop and deploy new technologies that would allow an orderly transition away from fossil fuels. ExxonMobil's deception deprived investors and consumers of the central facts so essential to their investment and purchasing choices: the knowledge that continued investment in ExxonMobil's fossil fuel business and production and use of ExxonMobil's fossil fuel products would bring about cataclysmic outcomes for humankind, many of the world's species, and the global economy.

40. Ed Garvey, a former Exxon scientist who worked for the Company from 1978 to 1983 conducting climate change research, was unequivocal in a recent interview that Exxon

knew forty years ago that climate change was happening, and that humans were contributing to it by burning fossil fuels:

The issue was not were we going to have a problem. The issue was simply how soon and how fast and how bad was it going to be. Not if. Nobody at Exxon when I was there was discussing that. It was just OK, how fast is it going to come?

41. Mr. Garvey noted that Exxon reversed course from its initial plans in the 1970s and early 1980s to act on its knowledge of the dangers of climate change and sound the alarm about continued reliance on fossil fuels, despite its knowledge of the harm that would result:

We [were] going to be an energy company and we recognize this problem [of climate change] and so we [were] going to help direct the country away from fossil fuels . . . [but Exxon] just said well we just want to make money on oil and we don't really care what happens. I mean, it upsets me, I don't know what else I can say.

42. ExxonMobil continues to deceive investors and consumers today. While the world reels from devastating climate disruption, and there are increasing calls on governments to declare a climate emergency, ExxonMobil continues to do what it has done for the past forty years—mislead and obfuscate, while delaying and downplaying the need for any immediate action to mitigate climate change. ExxonMobil is misrepresenting and failing to disclose to its investors the climate risks that the world and ultimately its business faces. And in its consumer marketing materials, ExxonMobil now falsely holds itself out as a leader in finding climate solutions, all while pursuing record levels of fossil fuel production, sales, and profits.

43. For ExxonMobil's violations of Chapter 93A with respect to Massachusetts investors and consumers, the Commonwealth requests, *inter alia*, comprehensive equitable remedies to stop ongoing investor and consumer deceptions by ExxonMobil and substantial monetary penalties for past misconduct.

II. PARTIES

44. The plaintiff is the Commonwealth, acting by and through the Massachusetts Office of the Attorney General (the “Attorney General”).

45. The Attorney General, with offices at One Ashburton Place, Boston, Massachusetts, is the chief legal officer of the Commonwealth. The Attorney General is authorized to bring this action and seek the relief requested pursuant to her authority under G.L. c. 12, §§ 3 and 11D, and G.L. c. 93A, § 4.

46. ExxonMobil is a New Jersey corporation and has its principal place of business at 5959 Las Colinas Boulevard, Irving, Texas, 75039. It is registered to do business in Massachusetts as a foreign corporation and maintains a registered agent for service of process with the Corporation Service Company, 84 State Street, Boston, Massachusetts, 02109.

47. ExxonMobil is the corporation formed on November 30, 1999, by the merger of Exxon (formerly the Standard Oil Company of New Jersey) and Mobil (formerly the Standard Oil Company of New York). As the surviving entity of the merger, ExxonMobil is liable for its own conduct, as well as the conduct of both Exxon and Mobil. As used in this complaint, “ExxonMobil” or the “Company” may refer to Exxon, Mobil, and/or ExxonMobil depending on the context.

III. JURISDICTION AND VENUE

48. This Court has jurisdiction over the subject matter of this action and to grant the relief requested pursuant to G.L. c. 212, § 4, G.L. c. 214, § 1, and G.L. c. 93A, § 4.

49. This Court has personal jurisdiction over the defendant, ExxonMobil, pursuant to the Massachusetts long-arm statute, G.L. c. 223A, § 3, and the U.S. and Massachusetts Constitutions because, as set forth in detail below, ExxonMobil transacts business and causes

harm in the Commonwealth, and the causes of action arise out of and relate to ExxonMobil's business here.

50. Venue lies in this Court pursuant to G.L. c. 93A, § 4, and G.L. c. 223, § 5.

51. This proceeding is in the public interest, and pursuant to G.L. c. 93A, § 4, the Attorney General has provided ExxonMobil with written notice at least five days before commencing suit and has given ExxonMobil an opportunity to confer regarding the Commonwealth's claims in this action.

IV. THE CONTEXT FOR THIS ACTION: EXXONMOBIL'S FOSSIL FUEL BUSINESS, ITS HISTORY OF CLIMATE DECEPTION, AND THE CLIMATE CHANGE CRISIS

A. ExxonMobil's Global Fossil Fuel Business and Its Role in Climate Change

52. Since 1999, when Exxon and Mobil merged, ExxonMobil has been the world's largest investor-owned oil and gas company. As of December 31, 2018, there were approximately 4.27 billion shares of ExxonMobil common stock issued and outstanding.

53. As of May 15, 2019, ExxonMobil ranked eleventh on Forbes's Global 2000 list of the world's largest public companies with a market capitalization of \$343.43 billion.

54. ExxonMobil is an integrated oil and gas company, meaning that it locates, extracts, refines, transports, markets, and sells fossil fuel products.

55. ExxonMobil has three primary business segments: "upstream" exploration and production operations; "downstream" refinery and retail operations; and its chemical business, which include the manufacturing and sale of various fossil fuel products that it advertises and sells to Massachusetts consumers.

56. ExxonMobil has been selling oil, gas, and other fossil fuel products for ultimate use by industry, governments, and individual consumers across the globe for more than a century, including in Massachusetts.

57. Over the last several decades, ExxonMobil has sold billions of barrels of oil, trillions of cubic feet of natural gas, and millions of tons of coal.

58. From 2001 through 2017 alone, ExxonMobil sold more than 42 billion barrels of petroleum products and earned more than \$5.6 trillion in sales and other operating revenue.

59. From 2001 through 2016, ExxonMobil sold, on average, approximately 8 percent of the total barrels of petroleum products consumed per day globally. In some years, ExxonMobil supplied close to 10 percent of global oil demand.

60. Between 2013 and 2018, ExxonMobil's upstream business was responsible for, on average, more than half of the Company's global earnings and more than 80 percent of its capital expenditures.

61. Most of ExxonMobil's assets are in the form of its global reserves of oil and gas, and the vast majority of its upstream business consists of the Company's producing activities in connection with these reserves. These reserves are ultimately intended to become finished petroleum products to be sold in both wholesale and retail markets, including in Massachusetts.

62. As of the end of 2017, ExxonMobil claimed proved reserves of 21.2 billion oil-equivalent barrels and a resource base of 97 billion oil-equivalent barrels.

63. As of the end of 2018, ExxonMobil claimed proved reserves of 24.3 billion oil-equivalent barrels and that it had added 1.3 billion oil-equivalent barrels to its resource base in that year.

64. As discussed in more detail in Sections IV.B and C, emissions of greenhouse gases, like carbon dioxide, are causing an increase in the Earth's global average surface and ocean temperatures.

65. Production, refining, and use (combustion) of ExxonMobil's fossil fuel products are a major source of dangerous greenhouse gases, including carbon dioxide (released, e.g., when ExxonMobil gasoline is burned in an internal combustion engine) and methane (released when ExxonMobil produces and transports natural gas).

66. In recent decades, ExxonMobil's operations and the use of its fossil fuel products have been one of the single largest sources of greenhouse gases emitted into the earth's atmosphere.

67. For just the period from 1988 to 2015, ExxonMobil was the largest emitter of greenhouse gases (including those emitted through the use of its products) among all U.S. companies and among global producers of fossil fuel products that are majority owned by non-governmental investors. ExxonMobil was the fifth largest emitter by this measure among all global producers.

68. Each of ExxonMobil's business segments generates its own greenhouse gas emissions. For example, ExxonMobil reported total "net equity greenhouse gas emissions" of 122 million CO₂-equivalent metric tons in 2017. In recent years, the greenhouse gas emissions from ExxonMobil's upstream operations have increased.

69. Greenhouse gas emissions from ExxonMobil's fossil fuel businesses and the use of its products are a major cause of global climate change.

B. ExxonMobil's Longstanding Internal Scientific Knowledge of the Causes and Consequences of Climate Change and Public Deception Campaigns

1. ExxonMobil has known since the 1970s that use of its fossil fuel products would have potentially "catastrophic" effects for humankind and that efforts to reduce the use of fossil fuels in response to climate change would pose a threat to ExxonMobil's bottom line.

70. For at least forty years, ExxonMobil and its management has been aware that increased carbon dioxide emissions would impact the climate and that such climatic effects and

consequent societal responses would be the primary factor limiting future use of fossil fuels for energy.

71. In the late 1970s, Exxon developed and spent hundreds of thousands of dollars on a sophisticated in-house research and development project to study carbon dioxide emissions and the greenhouse effect.

72. A May 1978 internal Exxon memorandum prepared by Exxon scientists confirmed that “there is general scientific agreement that the most likely manner in which mankind is influencing the global climate is through carbon dioxide release from the burning of fossil fuels.”

73. Exxon scientists understood then that, due to rising carbon dioxide emissions, there was a limited timeframe for planning and decision-making. “Present thinking,” they warned in the May 1978 memorandum, “holds that man has a time window of five to ten years before the need for hard decisions regarding changes in energy strategies might become critical.”

74. The “changes in energy strategies” Exxon’s scientists were contemplating were shifts away from reliance on fossil fuels to meet energy needs.

75. Exxon’s scientific research program included equipping a tanker ship, the Esso Atlantic, with equipment necessary to undertake a large-scale ocean sampling program with the goal of better understanding the role of the oceans in serving as a sink for carbon dioxide emissions.

76. From the late 1970s onward, Exxon was concerned about the implications of climate change for its business. Exxon’s rationale for initiating its climate change research project and tanker sampling program was set forth in a number of internal Exxon documents,

including a 1978 letter that described Exxon's "need to assess the possible impact of the greenhouse effect on Exxon business."

77. In a 1979 presentation by Exxon to the National Oceanic and Atmospheric Administration, Exxon described the rationale for its climate change research as "develop[ing] expertise to assess the possible impact of the greenhouse effect on Exxon business," and informing Exxon management of risks.

78. By 1979, Exxon had undertaken an analysis of how the fuel mix could be switched to meet a range of potential carbon dioxide emissions caps, and, in an October 1979 internal Exxon document, concluded that if it became "necessary to maintain atmospheric [carbon dioxide] levels to prevent significant climate changes, dramatic changes in patterns of energy use would be required."

79. Specifically, Exxon concluded, "[w]orld fossil fuel resources other than oil and gas could never be used to an appreciable extent."

80. In 1979, atmospheric carbon dioxide concentrations were still below 340 ppm, but steadily climbing.

81. In Appendix A, "Ecological Consequences of Increased CO₂ Levels," attached to the October 1979 analysis described in Paragraph 78, Exxon summarized existing research describing environmental effects anticipated when atmospheric carbon dioxide concentrations reached 500 and 580 ppm, respectively.

82. At 500 ppm, according to the Appendix A summary, environmental effects included (i) a global temperature increase of 3 degrees F, "which is the equivalent of a 1°-4° southerly shift in latitude"; (ii) Southwest states would be hotter, "probably by more than 3° Fahrenheit," and drier; (iii) the "flow of the Colorado River would diminish and the southwest

water shortage would become much more acute;” (iv) most glaciers in the North Cascades and Glacier National Park would melt, and there would be less winter snow pack in the Cascades, Sierras, and Rockies, necessitating a major increase in storage reservoirs; (v) “[m]arine life would be markedly changed,” and it would “become increasingly difficult” to maintain salmon and steelhead runs in the Columbia River system; and (vi) the “rate of plant growth in the Pacific Northwest would increase.”

83. At 580 ppm, (i) “[g]lobal temperatures would be 9°F above 1950 levels”; (ii) most areas would receive more rainfall, and “snow would be rare in the contiguous states, except on higher mountains”; (iii) ocean levels “would rise four feet”; (iv) melting of the polar ice caps “could cause tremendous redistribution of weight and pressure exerted on the earth’s crust” which could “trigger major increases in earthquakes and volcanic activity resulting in even more atmospheric CO₂ and violent storms”; (v) the “Arctic Ocean would be ice free for at least six months each year, causing major shifts in weather patterns in the northern hemisphere;” and (vi) the “present tropics” would be hotter and less habitable, but the “present [temperate]” latitude would be warmer and more habitable.

84. In a draft July 1980 communications plan regarding Exxon’s climate change research program, Exxon scientists recognized that “future public decisions aimed at controlling the build-up of atmospheric [carbon dioxide] could impose limits on fossil fuel combustion.” Central objectives of the proposed plan were “[t]o establish Exxon’s credibility as a leading authority on CO₂ / Greenhouse science, particularly among opinion leaders who are not scientists,” and to “help bring about better public understanding of the CO₂ / Greenhouse Effect.”

85. Exxon's Research & Engineering division calculated, in 1980, that a doubling of pre-industrial levels of atmospheric carbon dioxide (from 280 ppm to 560 ppm) was projected to occur by about 2060, and included its estimate in an internal memorandum dated December 1980.

86. According to Exxon's scientists, as set forth in the December 1980 memorandum, "[t]he most widely accepted calculations" showed that a doubling would result in a global average temperature increase of 3 +/- 1.5 degrees C. Other climatological factors expected to occur with a doubling of carbon dioxide included disturbances in the global water distribution balance, which "will have [a] dramatic impact on soil moisture, and in turn, on agriculture."

87. Describing in the December 1980 memorandum the proceedings of a scientific workshop on climate change, Exxon's scientists discussed how the potential harm from climate change would compare with similar existential threats to human survival, such as "a nuclear holocaust or world famine."

88. In a section of the memorandum titled "Future Scenarios and Their Consequences [f]or Exxon," the scientists reviewed "unlikely" scenarios, such as "stopping all fossil fuel combustion at the 1980 rate" and "maintaining the pre-1973 fuel growth rate." Consistent with their prior observations, Exxon's scientists underscored that new technologies, like solar and nuclear, would need about 50 years to penetrate and achieve about half of the total market.

89. As of at least 1980, Exxon participated as a member of the American Petroleum Institute ("API") in the "AQ-9" Task Force. Climate change expert Dr. J.A. Laurman made a presentation to the group, including Exxon, at a meeting that took place on February 29, 1980. Dr. Laurman's presentation was attached to the minutes of the February 29, 1980 meeting.

90. During his presentation to the AQ-9 Task Force, including Exxon, Dr. Laurman confirmed that it appeared that reducing fossil fuel use immediately would ease the problem of climate change, and that remedial action would take a long time to be effective.

91. During his presentation to the AQ-9 Task Force, including Exxon, Dr. Laurman also relayed that global average temperatures were expected to rise 2.5 degrees C (4.5 degrees F) by 2038, a change that would have “major economic consequences,” “bring[ing] world economic growth to a halt,” and that by 2067, temperatures would increase by 5 degrees C (9 degrees F), if emissions continued unabated, a change that would have “globally catastrophic effects.” Dr. Laurman emphasized that there was a very limited timeframe in which to take action to transition away from climate change-causing fossil fuels.

92. In an August 1980 internal memorandum prepared by Exxon subsidiary Imperial Oil Limited (Esso Canada), titled, “*Review of Environmental Protection Activities for 1978-1979*,” and copied to Exxon’s Houston office, Exxon’s subsidiary concluded “[t]here is no doubt that increases in fossil fuel usage and decreases in forest cover are aggravating the potential problem of increased CO₂ in the atmosphere.”

93. In December 1980, a leading Exxon scientist submitted Exxon’s comments on a draft statement of findings and recommendations by the National Commission on Air Quality CO₂ Workshop. Exxon expressed comfort with the draft, whose findings included that the net consequences of carbon dioxide-induced changes in climate would be “adverse to the stability of human and natural communities,” and that if action to address climate change was delayed until the effects of climate change were discernable, “then it is likely that they will occur too late to be effective.”

94. In its comments, Exxon recognized that “it is likely that policy actions to control the growth of atmospheric CO₂ levels will need to be taken with imperfect knowledge of the possibility and consequences of CO₂-induced climate change.”

95. Exxon also expressed comfort with the policy recommendations of the draft, which called for the United States to enter into international agreements to further research climate change and to undertake measures to control carbon dioxide emissions over the long term, and for the United States to provide greater support for developing alternatives to fossil fuels.

96. In a February 5, 1981, internal Exxon memorandum, Exxon scientists recognized that there were a limited number of options for reducing the build-up of atmospheric carbon dioxide, and that “[i]ndirect control measures, such as energy conservation or shifting to renewable sources, represent the only options that might make sense.”

97. As Exxon’s understanding deepened, its scientists’ warnings became more urgent. In an August 1981 internal memorandum, an Exxon scientist advised that it was “distinctly possible” that, over the long term, climate change will “produce effects which will indeed be catastrophic (at least for a substantial fraction of the earth’s population).”

98. The API, which included Exxon and Mobil among its members at the time, stated in a March 1982 report, “*Climate Models and CO₂ Warming: A Selective Review and Summary*,” that “[r]egardless of complexity, all climate model studies indicate that a doubling of CO₂ will produce a significant increase in the global and annual mean temperature of the earth.”

99. In 1982, the then-chair of Mobil, Rawleigh Warner, Jr., authored an article titled “*Energy and the Environment: the Next Decade*,” in which he wrote, “I recognize that [the greenhouse effect] too may become a serious issue for the future . . . I believe [efforts

underway] can supply us with the information to deal with this problem well before the catastrophic consequences which some predict can happen New issues, such as acid rain and the danger of carbon dioxide buildup, need to be carefully monitored, and action taken if necessary.”

100. In an internal September 1982 memorandum, a chief Exxon scientist set forth his unequivocal assessment that (i) there was a “clear scientific consensus” that a doubling of atmospheric carbon dioxide from pre-industrial levels “would result in an average global temperature rise of $(3.0 \pm 1.5) ^\circ\text{C}$ ” (8.1-2.7 degrees F); (ii) temperature increases were predicted to be distributed unevenly, with higher than average temperature elevations at the poles; (iii) there was “unanimous agreement in the scientific community that a temperature increase of this magnitude would bring about significant changes in the earth’s climate, including rainfall distribution and alternations in the biosphere”; (iv) based on projections of future fossil fuel consumption, a doubling of atmospheric carbon dioxide would occur sometime in the latter half of the 21st century; and (v) the results of Exxon’s own research were “in accord with the scientific consensus on the effect of increased atmospheric [carbon dioxide] on climate.”

101. In the September 1982 memorandum, Exxon’s scientists cited work by a Massachusetts Institute of Technology professor, Reginald Newell, that seemed in conflict with the scientific consensus and endeavored to demonstrate that Exxon’s own research “appears to reconcile” Newell’s work with the consensus scientific opinion. Thus, Exxon itself contributed to strengthening the scientific consensus on climatic effects of CO₂ emissions.

102. Exxon’s scientists also had a keen understanding, reflected in the September 1982 memorandum, of the implications of Exxon’s climate research on Exxon’s business, and of the potential for Exxon’s research to attract media attention, due to the “connection between Exxon’s

major business and the role of fossil fuel combustion in contributing to the increase of atmospheric CO₂.”

103. In the September 1982 memorandum, Exxon’s chief scientist encouraged the continuation of Exxon’s climate research because of the potential for Exxon’s research to “affect[] future energy scenarios,” and also because “our ethical responsibility is to permit the publication of our research in the scientific literature,” consistent with Exxon’s purported “ethical credo on honesty and integrity.”

104. In October 1982 remarks at the Ewing Symposium, the president of Exxon Research & Engineering recognized the scientific consensus on the fundamental science of climate change, and astutely observed that the real uncertainty concerned how it would affect Exxon: “It is ironic that the biggest uncertainties about the CO₂ buildup are not in predicting what the climate will do, but in predicting what people will do. The scientific community is apparently reaching some consensus about the general mechanisms of the greenhouse effect. It is considerably less agreed on how much fossil fuels mankind will burn”

105. Exxon’s management was fully apprised of the research and scientific conclusions of its scientists and was provided with memoranda summarizing their findings.

106. A 1982 memorandum that was “given wide circulation to Exxon management,” detailed anticipated and potential impacts associated with the projected temperature increases expected to result from increasing atmospheric carbon dioxide concentrations, including droughts, or, as Exxon’s scientists put it, “disturbances in the existing global water distribution balance [that] would have dramatic impact on soil moisture, and in turn, on agriculture”; desertification; and “potentially catastrophic events that must be considered,” such as melting of

the Antarctic ice sheet, which, according to Exxon, could cause a five-meter sea level rise and “flooding on much of the U.S. East Coast, including the State of Florida and Washington D.C.”

107. The 1982 memorandum urged further study of human health effects associated with climate change, including “stress associated with climate[-]related famine or migration.” In the memorandum, Exxon also identified the need to examine methods for “alleviating environmental stress on renewable resource production—food, fiber, animal[s], agriculture, tree crops, etc.”

108. The 1982 memorandum acknowledged concerns that “once the [greenhouse] effects are measurable, they might not be reversible.” The memorandum made clear that “[m]itigation of the ‘greenhouse effect’ would require major reductions in fossil fuel.”

109. The 1982 memorandum concluded that there was time for additional study and monitoring before specific action was taken, and that specific action likely would constitute curtailment of fossil fuel consumption.

110. In a February 1984 presentation by one of Exxon’s climate scientists titled, “*Corporate Research Program in Climate / CO₂-Greenhouse*,” a key objective for Exxon’s climate change research program was identified as “provid[ing] Exxon with a source of expertise in an area which could have major impact on future business environment.”

111. In a March 1984 Exxon Research & Engineering Vu-graph presentation titled “*CO₂ Greenhouse and Climate Issues*,” a leading Exxon scientist prepared graphs documenting the causal relationship between increasing atmospheric carbon dioxide concentrations and increasing average global temperatures, one of which was a version of the graph depicted in Paragraph 7 above, which appeared in the 1982 memorandum described in Paragraphs 106 through 109 above.

112. The March 1984 presentation listed the potential effects of warming, including redistribution of rainfall, accelerated growth of pests and weeds, detrimental human health effects, and human population migration.

113. Exxon's scientist observed in the March 1984 presentation that the Massachusetts Institute of Technology and Stanford University recommended that "[w]e must start talking to policy makers," and that the universities had suggested "extreme reduction in fossil fuel use through conservation and alternate technologies using electricity." MIT and Stanford, according to Exxon, believed that international debate on legislation was needed.

114. Exxon's scientist concluded the March 1984 presentation with the stark warning that "[w]e can either adapt our civilization to a warmer planet or avoid the problem by sharply curtailing the use of fossil fuels."

115. Thus it is evident that by the early 1980s, Exxon and its management knew that climate change presented dramatic risks to human civilization and the environment as well as a major potential constraint on fossil fuel use.

2. *ExxonMobil has masterminded and implemented a tobacco industry-style campaign to sow doubt and confusion among the public, including investors and consumers of its products, about the climate science Exxon helped to develop.*

116. Despite its early, unequivocal science-based understanding of the role of fossil fuels produced, refined, and marketed by Exxon in causing climate change, by the late 1980s and early 1990s, Exxon began to disavow the Company's knowledge of climate change and the potentially "catastrophic" effects of climate change on human civilization and global environments well researched by Exxon's own scientists, and well understood by its management.

117. Like the tobacco companies before it, which “were disseminating advertisements, publications, and public statements denying any adverse health effects of smoking and promoting their ‘open question’ strategy of sowing doubt,” at the same time they “internally acknowledged as fact that smoking causes disease and other health hazards,”⁴ ExxonMobil began a sophisticated, multi-million dollar campaign to sow doubt about whether climate change was occurring, and what role, if any, fossil fuel use played in causing climate change.

a) Exxon formulated the “Exxon Position”: emphasize uncertainty.

118. An August 1988 Exxon internal memorandum, captioned “The Greenhouse Effect,” captures Exxon’s intentional decision to misrepresent both its knowledge of climate change and the role of Exxon’s products in causing climate change.

119. The August 1988 memorandum confirmed that “[c]limate models predict a 1.5 [degree] C to 4.5 [degree] C global temperature increase in 100 years—depending on the projected growth in fossil fuel use.” It also confirmed that the “principal greenhouse gases are by-products of fossil fuel combustion.”

120. Notwithstanding that conclusion, the August 1988 memorandum set forth an “Exxon Position” in which Exxon would “[e]mphasize the uncertainty in scientific conclusions regarding the potential enhanced Greenhouse effect.” The August 1988 memorandum also made clear that Exxon “has not modified its energy outlook or forecasts to account for possible changes in fossil fuel demand or utilization due to the [g]reenhouse effect.”

121. In other words, Exxon would continue to project large growth in fossil fuel consumption, despite the warnings of its own scientists that curtailing fossil fuel use was necessary to avoid the potentially “catastrophic” impacts of climate change.

⁴ *United States v. Philip Morris USA Inc.*, 566 F.3d 1095, 1106 (D.C. Cir. 2009).

122. In a February 1989 presentation to the Exxon Board of Directors titled, “*Potential Enhanced Greenhouse Effects: Status and Outlook*,” an Exxon manager represented to its Board that “the 3 warmest years on record occurred in the 1980s. If this trend persists it could signal that enhanced greenhouse warming is finally becoming detectable.” During the presentation, the manager reported that “[c]onsensus predictions call for warming between 1.5-4.5 [degrees] C for doubled CO₂ with greater warming at the poles No one knows how to evaluate the absolute uncertainty in the numbers.”

123. In the February 1989 presentation, the Exxon manager advised Exxon’s board that the “Enhanced Greenhouse is still deeply imbedded in scientific uncertainty, and we will require substantial additional investigation to determine the degree to which its effects might be experienced in the future.”

124. Exxon also confirmed its knowledge that “[f]ossil fuels contribute most of the CO₂,” yet downplayed the implications of these facts, advising its board that “more rational responses will require efforts to extend the science and increase emphasis on costs and political realities to frame ‘adaptive’ measures which are doable and move towards constructive options.”

b) Exxon and major fossil fuel interests formed the Global Climate Coalition to distort climate science and deceive the public and consumers.

125. In or around 1989, Exxon and other corporations and trade groups representing the oil, coal, and auto industries formed the Global Climate Coalition. Exxon and the other entities funded the operations of the Global Climate Coalition. Exxon helped orchestrate the work of the Global Climate Coalition and received ongoing information about its activities.

126. Through an active public relations campaign ultimately targeting the public, including investors and consumers of fossil fuels, the Global Climate Coalition developed and distributed messaging material to members of the media that represented that, contrary to

Exxon's internal knowledge, the role of greenhouse gases in climate change was not well understood.

127. One tactic used by Exxon and the Global Climate Coalition to generate doubt about the validity of climate science was to create the false impression of a scientific debate over the legitimacy of climate science and over the role greenhouse gas emissions have in increasing global average temperatures. Background materials provided by the Global Climate Coalition to journalists for ultimate dissemination to the public, for example, pointed out that “scientists differ” on the role of greenhouse gases in climate change.

128. In funding the Global Climate Coalition and other similar organizations that published misinformation about the risks of climate change, Exxon directly contributed to deception of investors and consumers about the risks of climate change and the harmful consequences associated with the production and use of Exxon's fossil fuel products.

c) Contrary to its internal knowledge, ExxonMobil mounted an aggressive public attack on climate science and downplayed the role of its products—fossil fuels—in causing climate change.

129. In December 1995, Mobil authored on behalf of the Global Climate Coalition a memorandum critiquing the IPCC's statement that “the balance of evidence suggests that there is a discernible human influence on global climate.” Contrary to Global Climate Coalition member Exxon's own scientific research and its historic agreement with the scientific consensus on climate change, the Global Climate Coalition argued that the IPCC's statement went “beyond what can be justified by current scientific knowledge.”

130. In “public education” materials published by Exxon in 1996 and titled, “*Global warming: who's right? Facts about a debate that's turned up more questions than answers,*” Exxon described the purported benefits of a warming world, representing that (i) rising temperatures “could be part of the natural fluctuations that occur over long periods of time”; (ii)

computer-based climate models have been “unable to represent current temperatures and climate accurately”; (iii) computer models had begun to forecast “less extreme temperature rises” caused by greenhouse gas emissions; (iv) “a warmer world would be far more benign than many imagine”; (v) one study “suggests that a moderate warming would reduce mortality rates in the U.S., so a slightly warmer climate would be more healthful”; (vi) climate modeling “suggests that the number of hurricanes and their average wind speed will decline”; (vii) there was a “tremendous amount of uncertainty” about climate change; and (viii) “dramatic action now may be premature” since “[t]echnological advances will make greenhouse emissions reductions easier in the future.”

131. In May 1996, Exxon’s then-CEO, Lee Raymond, represented in a speech to the Economic Club of Detroit that, “[c]urrently, the scientific evidence is inconclusive as to whether human activities are having a significant effect on the global climate.”

132. In a 1996 article he authored and titled, “*Climate Change: don’t ignore the facts*,” Mr. Raymond criticized international efforts then underway “to cut the use of fossil fuels, based on the unproven theory that they affect the earth’s climate.” Mr. Raymond wrote, in stark conflict with Exxon’s own internal knowledge, that “[p]roponents of the global warming theory say that higher levels of greenhouse gases—especially carbon dioxide—are causing world temperatures to rise and that burning fossil fuels is the reason Yet scientific evidence remains inconclusive as to whether human activities affect global climate.”

133. In a November 1996 speech at the annual meeting of API in Washington, D.C., Mr. Raymond claimed that the “theory” that the use of fossil fuels is affecting Earth’s climate was “unproved.” Mr. Raymond represented that “scientific evidence remains inconclusive as to

whether human activities affect global climate.” Mr. Raymond urged opposition to efforts to reduce fossil fuel use, and expansion of efforts to develop fossil fuels.

134. Mr. Raymond continued to publicly contradict Exxon’s own research. In a 1997 speech to the World Petroleum Congress held that year in Beijing, Mr. Raymond told the audience of chief executive officers, international business leaders, heads of state, and members of the media that “[m]any people—politicians and the public alike—believe that global warming is a rock-solid certainty. But it’s not.”

135. Mr. Raymond represented in the Beijing speech that climate change computer models were “notoriously inaccurate,” “the case for so called global warming is far from air tight,” and “[i]t is highly unlikely that the temperature in the middle of the next century will be significantly affected whether policies are enacted now or 20 years from now.”

136. The year 1997 was the warmest of all years prior to 1997 for which temperature records existed. Yet, in the 1997 Beijing speech, Mr. Raymond stated that “the earth is cooler today than it was 20 years ago.”

137. On May 31, 2000, at ExxonMobil’s first shareholder meeting after the Exxon-Mobil merger, Mr. Raymond, having become ExxonMobil’s CEO, came prepared to publicly dispute the scientific conclusions regarding climate change that Exxon had reached over twenty years earlier.

138. At the meeting, Mr. Raymond answered a shareholder comment about scientific consensus on the need for a “long-term solution to global warming,” by showing a slide regarding a petition he said, falsely, was “signed by seventeen thousand scientists [and stating that] ‘[t]here is no convincing scientific evidence that any release of carbon dioxide, methane, or other greenhouse gases is causing or will in the foreseeable future cause catastrophic heating of

the earth's atmosphere and disruption of the earth's climate.'" By that time, this petition had been thoroughly discredited, counting among its supporting "scientists" numerous fake signatories such as fictional characters from the "Star Wars" movies and pop singer "Dr." Geri Halliwell of the Spice Girls.

139. In his response to the shareholder, Mr. Raymond continued:

So contrary to the assertion that has just been made that everybody agrees, it looks like at least seventeen thousand scientists don't agree. My point is not that these seventeen thousand are right and you're wrong. Your point is you're right and I'm wrong. I'm not saying you're wrong. What I am saying is there is a substantial difference of view in the scientific community as to what exactly is going on We're not going to follow what is politically correct

140. Mr. Raymond then presented other slides showing what were supposedly global temperatures graphed over time:

That's the earth's temperature as best these scientists are able to estimate what it was for the past three thousand years. It's been a long time since I went to graduate school. But if you just eyeball that, you could make a case statistically that, in fact, the temperature is going down. I am not asserting that. Similarly, I reject the assertion that it's going up.

141. The information in the slides consisted of (i) an outdated summary of twenty years of satellite temperature data that had been corrected in 1998 and, as corrected, showed rising temperatures and (ii) a temperature record for the waters of the Sargasso Sea, not the "earth," developed in research regarding evidence of certain natural climate variability in connection with ocean temperatures there.

142. In a December 2000 letter presented to ExxonMobil to rebuke Mr. Raymond for his misleading presentation, a senior scientist at the Massachusetts-based Woods Hole Oceanographic Institution explained that the Company had used the Sargasso Sea research, which he had authored, in a misleading manner to downplay the urgency of climate change. The

Woods Hole scientist wrote that “it is very misleading to use [my Sargasso Sea] data to argue against important climate changes that began a century ago. . . . I would have to say I believe ExxonMobil has been misleading in its use of the Sargasso Sea data. There’s really no way those results bear on the question of human-induced climate warming [T]he sad thing is that a company with the resources of ExxonMobil is exploiting the data for political purposes”

d) Despite its knowledge of likely adverse human health effects of climate change, Exxon promoted doubt and false debate over public health risks.

143. In September 1996, D.J. Devlin of Exxon Biomedical Sciences, Inc., prepared a presentation titled “*Purported Impact of Climate Change on Human Health*,” addressing the then-increasing interest in human health impacts of climate change. The presentation appears to have been circulated to Global Climate Coalition members.

144. The Exxon Biomedical Sciences presentation described what it referred to as the “Advocates’ Hypothesis,” which it described as “beliefs” that greenhouse gases were increasing, primarily due to fossil fuel use, and causing global average temperature to increase, which would lead to climatic changes, which would, in turn, directly and indirectly affect human health.

145. That “hypothesis” included assertions that human health would be directly impacted by climatic changes, including suffering and death due to thermal extremes and physical and psychological injuries and death due to weather-related disasters. Hypothesized indirect effects included increased range and activity of disease vectors and infective agents; increase in waterborne diseases through disturbances in freshwater ecosystems; population displacement due to rising sea level; regional declines in food production and weather disasters leading to increase in malnutrition, injuries, infections, and civil strife; increase in pollen and spores leading to increase in asthma, allergies and other respiratory diseases; and increase in

particulates and ozone leading to increased hospitalizations and deaths from cardiopulmonary diseases.

146. In a section titled “Conclusions,” the Exxon Biomedical Sciences presentation asserted that a “Balanced View” with respect to potential climate change health impacts was not evident in peer-reviewed journals and media accounts, and that it was “Extremely Difficult to Quantify” the general consensus that public health would be affected by climate-induced changes. Noting that the subject of climate change human health impacts is a “Potentially Emotional” issue, the presentation’s final section, titled “Potential Next Steps,” recommended that “Scientific Leaders with Diverse Views” be identified and encouraged to actively participate in “Debate,” and to “Promote [the] Concept of Relative Risk,” emphasizing the relative “Significance of Climate Impacts Vs. Other Disease Factors.”

147. The Exxon Biomedical Sciences presentation outlined a specific strategy for misleading the public by minimizing concern over the public health impacts of climate change, creating a false debate among so-called experts, and presenting climate-driven public health risk as less significant in comparison to other disease factors.

- e) **Exxon, with a veteran of the tobacco industry’s deception campaign, formed the Global Climate Science Communications Team to cause the public to doubt whether climate change was occurring and whether humans had a role in causing it.**

148. In or around 1998, Exxon joined with API, Chevron Corporation, Southern Company, and various climate denial front groups to establish the “Global Climate Science Communications Team,” a group formed for the express purpose of causing the public and decision makers to doubt the science of climate change.

149. Steven Milloy, representing “The Advancement of Sound Science Coalition,” or TASSC, was a founding member of the Global Climate Science Communications Team. TASSC

was originally founded by the Philip Morris tobacco company to fight smoking restrictions by discrediting the scientific link between exposure to second-hand cigarette smoke (passive smoking) and increased rates of cancer and heart disease. On the recommendation of its then-public relations firm, APCO, which advised Philip Morris that the tobacco company would not be a credible voice on the issue of smoking and public health, Philip Morris had launched TASSC with the goal of creating the false impression that it was a grassroots citizen's group fighting overregulation. The Philip Morris-conceived TASSC, renamed The Advancement of Sound Science Center, went on to become a corporate and Exxon-funded fake grassroots citizen group spreading doubt about climate science.

150. Myron Ebell, whom the *Financial Times* described in 2010 as “one of America’s most prominent climate-change skeptics” also was a founding member of the Global Climate Science Communications Team, representing “Frontiers of Freedom” where he was then-policy director.

151. Deploying the tactics of the tobacco industry’s campaign to sow doubt about the public health dangers of smoking, Exxon and the Global Climate Science Communications Team crafted a plan to convince the public that the scientific basis for climate change was in doubt.

152. In an April 3, 1998, document titled “Global Climate Science Communications Plan,” to which Exxon employee Randy Randol had contributed, Exxon and its collaborators maintained, despite Exxon’s longstanding scientific knowledge to the contrary, that it was “not known for sure whether (a) climate change actually is occurring, or (b) if it is, whether humans really have any influence on it.”

153. The Plan identified “strategies and tactics” to be used by Exxon and its collaborators, including to (i) “[d]evelop and implement a national media relations program to

inform the media about uncertainties in climate science; to generate national, regional and local media coverage on the scientific uncertainties”; (ii) “[d]evelop a global climate science information kit for media including peer-reviewed papers that undercut the ‘conventional wisdom’ on climate science”; (iii) “[p]roduce . . . a steady stream of op-ed columns”; and (iv) “[d]evelop and implement a direct outreach program to inform and educate members of Congress . . . and school teachers/students about uncertainties in climate science.”

154. Exxon and its collaborators laid out in the Global Climate Science Communications Plan the criteria by which they would know when their efforts to sow doubt had been successful. “Victory,” they wrote, “will be achieved when average citizens ‘understand’ (recognize) uncertainties in climate science,” and “recognition of uncertainty becomes part of the ‘conventional wisdom.’”

155. The Global Climate Science Communications Team understood that, as a Brown and Williamson tobacco company internal memo famously observed, “[d]oubt is our product since it is the best means of competing with the ‘body of fact’ that exists in the mind of the general public. It is also the means of establishing a controversy.”

156. Later in 1998, Exxon published a report for the public titled, “*Global climate change: everyone’s debate*,” that faithfully tracked the strategies set forth in the Global Climate Science Communications Plan. The report asked, “Does the tiny portion of greenhouse gases caused by burning fossil fuels have a measurable effect on worldwide climate? No one knows for sure.”

f) ExxonMobil spent millions on an unprecedented “advertorial” campaign in *The New York Times* casting doubt on climate science, urging delay on climate action, and mocking technologies that provide alternatives to fossil fuels.

157. ExxonMobil’s strategy to sow doubt about climate change made use of “advertorials,” advertisements specifically designed to appear to readers as if they were actual opinions published in the opinion section of *The New York Times*.

158. Mobil had purchased advertorials since 1970, and ExxonMobil continued to purchase them after Mobil’s merger with Exxon. The advertorials typically ran every Thursday and appeared periodically through at least 2004.

159. In remarks made by Mobil’s then-chair, Rawleigh Warner Jr., in various speeches during the 1970s, Mr. Warner bragged that one of the most effective ways to “explain complex subjects” to the public was to buy advertising space, specifically, the “quarter-page advertisement” Mobil published “every Thursday, year-round, on the page opposite the editorial page of *The New York Times*.” Mr. Warner told his audiences that Mobil had “taken the offensive,” in purchasing these “essay-type ads,” which are “an integral part of an editorial section that is ‘must’ reading.” Mr. Warner referred to the pieces as “advocacy advertising.”

160. During the decades in which the advertorials appeared in *The New York Times*, *The New York Times* had a circulation among tens of thousands of readers in Massachusetts. In this way, ExxonMobil actively endeavored to confuse Massachusetts investors and consumers with the advertorials’ messages.

161. As the fossil fuel industry sought to address growing public concern about climate change, which could result in regulation that would decrease demand for fossil fuel products, the advertorials became a centerpiece of ExxonMobil’s efforts to deceive the public about the science of climate change and the issue’s significance to investors and consumers.

162. ExxonMobil's use of these advertorials to shift public perception was among the most significant and longest regular—in this case, weekly—uses of media to influence public and stakeholder opinion in modern U.S. history.

163. A substantial number of the advertorials specifically sought to minimize concern about climate change, urging delay in regulatory action to control greenhouse gas emissions, and criticizing and questioning the very consensus scientific position on climate change that Exxon had helped to develop and accepted.

164. Among the messaging the Company used to sow doubt about climate change, ExxonMobil's advertorials mocked the known scientific consensus about climate change and disparaged concerns about the known catastrophic risks associated with it. For example, as early as 1984, an advertorial titled "*Lies they tell our children*," described as a "lie" and among "the myths of the 1960s and 1970s" still being perpetuated by schools the coming "horror[]" that "a greenhouse effect . . . would melt polar ice caps and devastate U.S. coastal cities."

165. ExxonMobil's advertorials deceptively asserted that the science was uncertain, notwithstanding what ExxonMobil itself knew about the impending risks from climate change. In 1993, an advertorial titled "*Apocalypse no*," stated that, although "[f]or the first half of 1992, America was inundated by the media with dire predictions of global warming catastrophes . . . the media hype proclaiming that the sky was falling did not properly portray the consensus of the scientific community." The advertorial went on to criticize "[t]he lack of solid scientific data" and state that "the jury's still out on whether drastic steps to curb CO₂ emissions are needed," as "the phenomenon—and its impact on the economy—are important enough to warrant considerably more research before proposing actions we may later regret." "Perhaps," said the advertorial, "the sky isn't falling, after all."

166. In a series of advertorials published in the fall of 1997, the advertorials repeatedly emphasized a narrative of scientific uncertainty that ExxonMobil knew to be false, saying that:

- a. “[t]he science of climate change is too uncertain to mandate a plan of action” (*“Reset the alarm”*);
- b. “[w]e don’t know enough about the factors that affect global warming and the degree to which—if any—that man-made emissions (namely, carbon dioxide) contribute to increases in Earth’s temperature” (*“Climate change: a prudent approach”*);
- c. “climatologists are still uncertain how—or even if—the buildup of man-made greenhouse gases is linked to global warming” (*“Climate change: where we come out”*); and
- d. “there is a high degree of uncertainty over timing and magnitude of the potential impacts that man-made emissions of greenhouse gases have on climate” (*“Climate change: a degree of uncertainty”*).

167. Other advertorials counseled against taking action to reduce emissions and fossil fuel reliance and presented delay as the prudent choice, despite ExxonMobil’s internal knowledge that there was a limited window in time for shifting away from fossil fuels. In 1996, an advertorial titled *“Less heat, more light on climate change”* warned that international action to stem climate change “may well outrun science and common sense”:

The greenhouse effect is a natural phenomenon . . . [and] makes our planet habitable. Naturally occurring greenhouse gases—predominantly water vapor—account for 95 to 97 percent of the current effect. The other 3 to 5 percent is attributable to man’s activities

The concentration of greenhouse gases is building up slowly—less than 0.5 percent annually for CO₂—and that gives us time to implement effective mitigation measures.

168. Again and again, the advertorials warned that “havoc” would result from hasty action on climate change (e.g., “*Climate change: we’re all in this together*,” 1996; “*A policy agenda for tomorrow*,” 1996; “*Stop, look and listen before we leap*,” 1997), calling for “[b]etter science and flexible timing” and “tak[ing] the time to do it right” because “the underlying science and economics continue to signal caution” and “there is no consensus on what constitutes ‘dangerous levels’ of emissions” (e.g., “*A policy agenda for tomorrow*,” 1996; “*Climate change: Let’s get it right*,” 1997; “*Stop, look and listen before we leap*,” 1997).

169. In 2000, ExxonMobil continued to use advertorials to deny the science of climate change, repeating long-debunked tropes about the lack of reliability of weather forecasts as indicative of science’s inability “to make reliable predictions about future changes” and the “academic studies and field experiments” supposedly showing that “increased levels of carbon dioxide” would benefit the world by “promot[ing] crop and forest growth” (e.g., “*Unsettled Science*”). Contrary to its own internal knowledge and the warnings of its own scientists in the 1970s and early 1980s, ExxonMobil’s advertorials continued to claim that, in light of “gaps in scientific understanding,” “there is not enough information” about climate change “to justify . . . dramatically reducing the use of energy now” (e.g., “*The Path Forward on Climate Change*,” “*Do No Harm*”).

170. As late as 2004, an ExxonMobil advertorial, “*Weather and climate*,” stated that “scientific uncertainties continue to limit our ability to make objective, quantitative determinations regarding the human role in recent climate change or the degree and consequences of future change.”

- g) **While Exxon funded a public campaign of climate denial, privately it relied on climate science and climate models to prospect for fossil fuels, obtain intellectual property rights, and protect fossil fuel infrastructure.**

171. Professor Martin Hoffert, a former New York University physicist who researched climate change as an Exxon consultant, recalled in a recent interview that “even though we were writing all these papers which were basically supporting the idea that climate change from CO₂ emissions was going to change the climate of the earth according to our best scientific understanding, the front office [of Exxon], which was concerned with promoting the products of the company, was also supporting people that we called climate change deniers. . . to support the idea that the CO₂ Greenhouse was a hoax.”

172. Professor Hoffert explained that Exxon had a lot of data showing that the carbon dioxide in the atmosphere was increasing, even though the temperature of the earth hadn’t increased yet. He recalled that “[w]e had various mathematical models, very advanced computer models, from which we could sort of figure out how the climate of the earth might change in some future time if we kept burning hydrocarbons for energy.”

173. These models were so reliable, in fact, that Exxon and Mobil were using them to prospect for fossil fuels.

174. For example, at the 1992 Canada / United States Symposium on the Impacts of Climate Change on Resource Management of the North, Ken Croasdale of Esso Resources, Calgary (Exxon subsidiary Imperial Oil), presented a paper, *Climate Change Impacts on Northern Offshore Petroleum Operations*. Mr. Croasdale was, at that time, a senior ice researcher for Exxon’s Canadian subsidiary and was leading a team of researchers and engineers to determine how climate change would impact the economics of Exxon’s Arctic operations. In

1991, he had told an audience of engineers that the increase in atmospheric greenhouse gases was “due to the burning of fossil fuels,” and that “[n]obody disputes this fact.”

175. According to the U.S. Geological Survey, the Arctic holds about one-third of the world’s untapped natural gas and approximately thirteen percent of the world’s undiscovered oil, making it a potentially extremely lucrative target for fossil fuel exploration. Because most of the Arctic’s fossil fuel deposits are located offshore, however, the cost of extracting those resources had been prohibitive.

176. In his 1992 presentation, Exxon’s Croasdale reviewed climate modeling projections that showed potential changes in the Beaufort Sea due to “global warming,” including warmer air temperatures, decrease in first-year and multiyear ice thickness, and a longer ice-free open water season—increasing from 60 to 90 or even 150 days.

177. At the time Mr. Croasdale presented the paper, the Beaufort Sea typically experienced nine months of ice cover and a limited open water season that made conventional offshore oil drilling uneconomic. The changes projected by climate models to take place in the Beaufort Sea as a result of climate change, however, were expected to change the economic potential for Arctic exploration, largely benefitting companies like Exxon, because “if ice conditions become less severe as predicted, then offshore petroleum operations will become easier and less costly.” In particular, Mr. Croasdale relayed that a “shorter, less severe ice season would push exploration costs lower and more towards the use of floating systems.” The paper noted, as well, that some of the anticipated impacts of climate change, like permafrost melting and instability, could lead to higher operating costs for oil and gas trunk lines.

178. Mr. Croasdale’s team at Exxon used the same global circulation climate models developed by the Canadian Atmospheric Environment Service and NASA’s Goddard Institute for Space Studies that Exxon publicly reviled and dismissed as unproven.

179. Within a few years of Mr. Croasdale’s presentation, and just two years after Exxon’s then-CEO Raymond proclaimed to an audience in Beijing that climate change computer models were “notoriously inaccurate,” Exxon sought to patent technology based on that modeling that would facilitate year-round drilling in Arctic offshore locations, like the Beaufort Sea. For example, U.S. Patent 6,374,764, assigned to ExxonMobil Upstream Research Company, filed in 1999, and issued in 2002, described a design to allow for the installation of a deck on an offshore oil platform in severe Arctic conditions. According to the patent, “[t]he invention is useful in any offshore environment but is particularly suited for economic development of offshore hydrocarbon reserves in severe [A]rctic regions.”

180. Exxon also filed in 1999 U.S. Patent 6,371,695, assigned to ExxonMobil Upstream Research Company and issued in 2002, which described a caisson (footings affixed to the sea floor that support drilling and production decks above) to make offshore oil platforms more resistant to severe storms and ice loads so that these platforms could be used for year-round operations in the Arctic. In 2007, ExxonMobil obtained WIPO Patent WO2007/126477, assigned to ExxonMobil Upstream Research Company, which described a mobile, year-round drilling system “for drilling offshore wells and/or performing other offshore activities at multiple, successive locations in an [A]rctic or sub-[A]rctic environment.”

181. The modeling-based predictions Exxon relied on for the Beaufort Sea have been highly accurate—indeed, the Beaufort Sea has experienced some of the largest sea ice losses in the Arctic, and its open water season has substantially increased.

182. Exxon also used climate science and modeling to protect its existing infrastructure. Beginning in or around 1996, while Exxon was working in concert with the fossil fuel industry to reposition climate science as uncertain and minimize public concern over climate change, Exxon's subsidiary, Imperial Oil, and Mobil—which would merge with Exxon three years later, in 1999—were incorporating climate science into engineering projects.

183. For example, Mobil engineers ensured that the Sable gas field project, which was at the time owned jointly by Mobil, Imperial Oil, and Shell, was designed to make structural allowances for rising temperatures and sea levels caused by climate change.

184. Maclaren Plansearch, the firm hired by Mobil to prepare the environmental assessment for Sable, used engineering standards that incorporated the potential impacts of global warming on sea level rise, and the assessment accounted for the likelihood of climate change-driven increased storm intensity.

185. Similarly, Imperial Oil provided financial and technical support for scientific assessments of the impact of climate change on permafrost degradation in the Mackenzie Valley, a site of major oil refining and exploration for the Company. That research occurred prior to and contemporaneous with an effort by Imperial Oil and other oil companies to develop a natural gas pipeline from the Beaufort Sea across the Mackenzie Valley.

186. In fact, Esso Resources Canada Ltd. (an Imperial Oil subsidiary) had been funding research into the effects of climate warming caused by increased greenhouse gas emissions on the Mackenzie Valley and Mackenzie Delta since at least 1989 in order to understand how climate change would affect fossil fuel development in that region.

- h) Through the 2000s and 2010s, ExxonMobil used proxies, employed other indirect means, and itself continued to make statements that cast doubt on the role of fossil fuels in causing climate change.**

187. In recent years, ExxonMobil has continued to downplay and obscure the risks posed by climate change.

188. Following a July 2006 meeting with ExxonMobil, in September 2006, the Royal Society of London for Improving Natural Knowledge (“Royal Society”), the independent scientific academy of the United Kingdom and oldest scientific academy in continuous existence in the world, revealed in a letter to ExxonMobil that the Company had funded thirty-nine groups in the United States to spread doubt and confuse the public about the science of climate change.

189. The September 2006 Royal Society letter documented that ExxonMobil had spent more than \$2.9 million in 2005 alone to fund these groups.

190. The Royal Society expressed concern “about the support that ExxonMobil has been giving to organisations that have been misinforming the public about the science of climate change.”

191. In its letter, the Royal Society specifically criticized the Company for making misleading statements in its Corporate Citizenship Report that warming observations are based on expert judgment rather than objective statistical methods. The Royal Society letter pointed out that statements in ExxonMobil’s documents “are not consistent with the scientific literature that has been published on this issue,” i.e., the role greenhouse gas emissions and human activity have in climate change, and documented that ExxonMobil’s public statements regarding the uncertainty of climate science were contradicted by recent research by ExxonMobil’s own scientists: “What is even more surprising about your documents’ lack of consistency with the IPCC’s assessment is that one of ExxonMobil’s employees, Haroon Kheshgi, was one of the

contributing authors on Chapter 12 [of the IPCC Third Assessment Report],” the Royal Society wrote, “[which] points out that ‘The warming over the last 50 years due to anthropogenic greenhouse gases can be identified despite uncertainties’”

192. Until at least 2009, ExxonMobil also funded fringe research without any significant support in the scientific community to cast doubt on the role of fossil fuels in causing climate change. For example, ExxonMobil funded research by Wei-Hock Soon, a part-time Harvard-Smithsonian Center for Astrophysics employee who holds a degree in aerospace engineering and claimed variations in the sun’s energy was the primary cause of recent global warming, not human activity, including the combustion of fossil fuels. Mr. Soon presented his conclusions to the U.S. Congress, state legislatures, and the media in a manner that was intended to reach the general public. According to media reports, Mr. Soon accepted over a million dollars from ExxonMobil and other companies in the fossil fuel industry, and he failed to disclose that conflict of interest in his published scientific research papers. In correspondence with his funders, Mr. Soon described many of his scientific papers as “deliverables” he completed in exchange for their money.

193. According to 2007 testimony to the U.S. House of Representatives Committee on Science and Technology, Subcommittee on Investigations and Oversight, by Harvard University’s Dr. James McCarthy, ExxonMobil funded a network of forty-three organizations “to distort, manipulate and suppress climate science, so as to confuse the American public about the reality and urgency of the global warming problem, and thus forestall a strong policy response.” Its funding of such groups that deny and downplay climate change, including funding of the American Council on Science and Health, continues today.

194. In addition to recent funding of third parties with a track record of climate change denial at odds with the Company’s own longstanding understanding of the science, ExxonMobil’s senior-most management continues to downplay climate change risks, as well.

195. At a June 2012 speech to the Council on Foreign Relations, available to Massachusetts investors and consumers on the Internet, then-ExxonMobil CEO Rex Tillerson told his audience, comprised of investment professionals and journalists among others, that there are “much more pressing priorities” than climate change, and that climate change is an “engineering problem, and it has engineering solutions.”

196. Despite the longstanding scientific consensus that warming impacts increase with rising atmospheric carbon dioxide concentrations, and ExxonMobil’s own internal knowledge, at ExxonMobil’s 2015 annual shareholders meeting, Mr. Tillerson represented that “we don’t really know what the climate effects of 600 ppm [parts per million of carbon dioxide] versus 450 ppm will be, because the [climate] models simply are not that good.”

C. The Existential Threat of Climate Change

197. The pre-industrial concentration of carbon dioxide in the atmosphere was about 280 ppm; 316 ppm in 1958, 340 ppm in 1980, 400 ppm in 2015, 405 ppm in 2017, and 415 ppm in 2019—the highest concentration reached in millions of years.

198. The five hottest years on record have all occurred since 2010; the ten warmest years occurred since 1998; and the twenty warmest years since 1995. 2016 was the hottest year on record, followed by 2015, 2017, and 2018.

199. To date, global average air temperatures have risen approximately 1 degree C (1.8 degrees F) above preindustrial temperatures due to human activity, including combustion of fossil fuels.

200. In 1994, the United Nations Framework Convention on Climate Change (“Convention”) entered into force; there are 197 parties to the Convention, including the United States. The Convention’s objective was to stabilize the atmospheric concentration of greenhouse gases “at a level that would prevent dangerous anthropogenic interference with the climate system.” Between 1994 and the present, the Convention has received reports from the Intergovernmental Panel on Climate Change (“IPCC”), the international body for assessing the science related to climate change, which was established to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.

201. The IPCC has concluded that the warming of the climate system is unequivocal and that since the 1950s, many of the changes observed are unprecedented over decades to millennia. The atmosphere and oceans are warming, snow and ice cover is shrinking, and sea levels are rising.

202. The IPCC has concluded that emissions of carbon dioxide from fossil fuel combustion and industrial processes contributed about seventy-eight percent of the total greenhouse gas emissions increase from 1970 to 2010.

203. Because burning fossil fuels is responsible for nearly four-fifths of the increase in greenhouse gas emissions over the past decades, efforts have been undertaken to estimate how much of the world’s proven, economically recoverable fossil fuel reserves (oil, gas, and coal) may be produced and burned while still staying on course to limit warming to safer levels. Those estimates of burnable reserves have declined over time; in the ten-year period from 2009 to 2019, estimates have declined precipitously, from half of recoverable reserves in 2009, to about one-fifth of those reserves in 2018.

204. In 2009, the journal *Nature* published a study that sought to answer the question of how much of the world's proven, economically-recoverable fossil fuel reserves could be burned if humankind seeks to avoid warming in excess of 2 degrees C (3.6 degrees F) relative to pre-industrial levels, by then the internationally-recognized target for mitigating climate change risks, impacts, and damages. The study found that, to meet that temperature stabilization target, fewer than half of those reserves could be burned. The study confirmed that fossil fuels will not run out before we reach the point when we can no longer burn them, if we seek to avoid warming greater than 2 degrees C. It also made clear that if all such reserves were burned, humankind would exceed the allowable carbon dioxide emissions to meet that target, the world's so-called "carbon budget," by two to three times.

205. In 2012, the International Energy Agency's World Energy Outlook for the first time announced that *no more than one-third* of proven reserves of fossil fuels could be consumed prior to 2050 if the world aimed to achieve the goal of limiting warming to a safer level of 2 degrees C (3.6 degrees F). In other words, two-thirds of the world's known reserves must remain unburned. The following year, in 2013, the IPCC issued its first ever carbon budget, which determined that, to meet the 2 degree C target, the world could emit no more than an additional 485 gigatons of carbon, again underscoring the fact that substantial portions of known reserves cannot be burned if humanity is to avert catastrophic climate change.

206. In 2014, the IPCC finalized its Fifth Assessment Report, which concluded, among other things, that:

Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems. Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions which, together with adaptation, can limit climate change

risks. . . . Without additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread and irreversible impacts globally.

207. As discussed in more detail below, in 2015, the nations of the world adopted the Paris Agreement, which aims to keep the global temperature increase well below 2 degrees C above pre-industrial levels and to pursue efforts to limit it to 1.5 degrees C.

208. In October 2018, the IPCC issued a gravely urgent report that concluded, with a high degree of scientific confidence, that if the current pace of emissions continues, warming will reach 1.5 degrees C (2.7 degrees F) above pre-industrial levels between 2030 and 2052. The IPCC stressed that warming above that level brings significantly increased risk for all relevant parameters—including human health, food security, economic productivity, water supply, national security, adaptation needs, drought, sea level rise, biodiversity, species loss and extinction, ecosystem impacts, and ocean temperature and acidity.

209. A co-chair of one of the IPCC working groups on the October 2018 IPCC report explained that “[o]ne of the key messages that comes out very strongly from this report is that we are already seeing the consequences of [one degree Celsius] of global warming through more extreme weather, rising sea levels and diminishing Arctic sea ice, among other changes.”

210. The October 2018 IPCC report was unequivocal in its conclusion that the world must reduce global carbon dioxide emissions dramatically well before 2030 if we are to maintain temperature increase below 1.5 degrees C (2.7 degrees F). In this regard, the October 2018 IPCC report concluded that to have an even chance of meeting the 1.5 degrees C target, the world can emit no more than an additional 158 gigatons of carbon, which is equivalent to about twenty percent of the world’s known fossil fuel reserves. In other words, about eighty percent of those reserves cannot be burned to stay within a carbon budget that would likely meet the 1.5 C target.

211. It appears that any production from new oil and gas fields, other than those already in production or under development, is not compatible with a 1.5 degree C target. As a result, all of the \$4.9 trillion in forecasted capital expenditures for new oil and gas fields industry-wide is incompatible with the goal of limiting warming to 1.5 degrees C.

212. On November 23, 2018, the thirteen federal agencies that comprise the U.S. Global Change Research Program (“USGCRP”) issued Volume II of the Fourth National Climate Assessment (“Assessment”). The Assessment was produced by over 300 federal and non-federal experts, reviewed by the thirteen federal USGCRP member agencies, and peer reviewed by the National Academies of Sciences, Engineering, and Medicine.

213. The Assessment concluded that “[t]he impacts of climate change are already being felt in communities across the country” and would intensify in the future:

More frequent and intense extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems, and social systems that provide essential benefits to communities. Future climate change is expected to further disrupt many areas of life, exacerbating existing challenges to prosperity posed by aging and deteriorating infrastructure, stressed ecosystems, and economic inequality. Impacts within and across regions will not be distributed equally. People who are already vulnerable, including lower-income and other marginalized communities, have lower capacity to prepare for and cope with extreme weather and climate-related events and are expected to experience greater impacts.

214. With respect to economic impacts in the United States, the Assessment warned that “rising temperatures, sea level rise, and changes in extreme events are expected to increasingly disrupt and damage critical infrastructure and property, labor productivity, and the vitality of our communities.”

215. As a result of these impacts, and with continued growth in greenhouse gas emissions, the Assessment concluded that “annual losses in some economic sectors are projected

to reach hundreds of billions of dollars by the end of the century—more than the current gross domestic product (GDP) of many U.S. states” —or in the worst-case scenario, more than ten percent of gross domestic product in the United States as a whole. Such U.S. economic losses will be severe: serious declines in U.S. crop production, including an estimated seventy-five percent decrease in southern Midwest corn production; decreased dairy production (the U.S. dairy industry experienced heat-stress-related losses of about \$1.2 billion in 2010 alone); \$230 million in losses to the shellfish industry by century’s end due to ocean acidification; an estimated loss of half a billion labor hours in the Southeast by that time, due to extremely hot temperatures; and at least \$1 trillion in U.S. coastal real estate at risk.

216. Climate change impacts drive and intensify other societal risks. The World Economic Forum’s Global Risks Report for 2019—an annual survey of almost 1,000 world business and other leaders—identified extreme weather and the failure of climate change mitigation and adaptation measures as the top two likeliest global risks, i.e., events or conditions that, if they occur, can cause significant negative impact for several countries or industries within the next 10 years. The Report identifies climate change risks as interconnected with other global risks, such as large-scale involuntary migrations, food and water crises, the spread of infectious disease, failures of national, regional, or global governance, interstate conflict, state collapse or crisis, profound social instability, and financial risks, including asset bubbles, fiscal crises, and failures of financial mechanisms or institutions.

217. Globally, credible recent estimates of future climate-related costs are overwhelming. Valuations of the risks climate change poses to manageable assets worldwide (i.e., those held outside banks) range from \$4.2 to \$43.0 trillion in net present value terms, depending on the discount rates used, which is up to 30 percent of the value of global

manageable assets today. A similar accounting by Moody's Analytics, using IPCC data reflecting warming of only 2 degrees C, projected global climate-related costs of \$69 trillion by the end of this century.

218. Should greenhouse gas emissions cause global temperatures to rise by 3.7 degrees C by the end of the century, by one recent estimate that accounts for market impacts, non-market impacts, impacts due to sea level rise, and impacts associated with large-scale discontinuities, the net present value of climate change impacts will be \$551 trillion, more than all the wealth that currently exists in the world.

219. In the IPCC's high-emission scenario, according to another peer-reviewed estimate, climate change will reduce global economic output by 23 percent by the end of the century. Near the equator, in countries like India where ExxonMobil confidently projects massive new demand for fossil fuels, the projected impacts are effectively cataclysmic: in India, a *92 percent* reduction in economic output from climate change. It is expected, according to other research, that such reductions have a "ripple effect" throughout the world that cascade through concomitant reductions in the economic output of the world's other national economies.

220. The largest source of U.S. anthropogenic greenhouse gas emissions is fossil fuel combustion. In 2016, fossil fuel combustion accounted for 76 percent of U.S. greenhouse gas emissions, and in 2017, nearly half of U.S. energy-related carbon dioxide emissions (by far the dominant contributor to overall greenhouse gas emissions) came from combustion of petroleum products, such as those marketed and sold by ExxonMobil.

221. As ExxonMobil knew decades ago, if humankind is to avoid dangerous levels of warming, we must "sharply curtail" the use of fossil fuels, which means that the majority of the

world's proven, economically recoverable fossil fuel reserves—the Company's most valuable asset—must remain unburned.

D. Climate Change Is Having Major Impacts on Massachusetts.

222. Climate change is having, and will continue to have, increasingly serious, life-threatening, and costly impacts on the people of the Commonwealth, as well as the lands, waters, coastline, species, natural resources, infrastructure, and other assets owned by the Commonwealth and its political subdivisions, or in which the Commonwealth has sovereign and proprietary interests. As discussed more fully in Section V, these impacts also threaten the value of Massachusetts investor holdings.

223. In Massachusetts, climate change is likely to increase flooding, harm ecosystems, disrupt fishing and farming, and increase certain risks to public health, and is indeed already having these effects.

224. Temperatures in Massachusetts have warmed by an average of 1.3 degrees C (2.34 degrees F) since 1895, almost twice as much as the rest of the contiguous forty-eight states.

225. The Northeast has seen the country's largest increases in heavy precipitation events, with some areas in Massachusetts experiencing an increasing trend in the number of days with two inches of precipitation or more from 1970-2008.

226. Flooding has increased in association with extreme precipitation events, causing costly property damage and putting fish, wildlife, and their habitats at increased risk.

227. Increasing incidence and severity of coastal storms in Massachusetts is consistent with the trends expected as greenhouse gas concentrations in the atmosphere increase and the climate continues to warm. Recent sea level rise along the Northeast coast, including Massachusetts, has been three to four times the global rate. As a coastal state, Massachusetts is particularly vulnerable to sea level rise caused by climate change, which is already exacerbating

coastal flooding and erosion from storm events and will eventually inundate low-lying communities, including the City of Boston.

228. Since 1990, Massachusetts has been affected by numerous major weather disasters, including Superstorm Sandy, a post-tropical storm in 2012 that was made more harmful by climate change, due in part to higher baseline sea level. Impacts from Superstorm Sandy in Massachusetts included strong winds, record storm tide heights, flooding of coastal areas, loss of power for 385,000 residents, and an estimated \$375 million in property losses.

229. In January 2018, the storm surge from a powerful winter storm caused major coastal flooding and resulted in a high tide in Boston of 15.16 feet, the highest tide since records began in 1921, even surpassing the infamous Blizzard of 1978. This storm caused an estimated \$1.1 billion in property damage across the United States, including in Massachusetts.

230. More intense storms have increased the price of electricity to Massachusetts residents as Massachusetts utilities pass along to consumers the significant costs of preparing for and restoring service after severe weather events.

231. More intense storms also threaten the aging combined sewer and stormwater systems serving many Massachusetts cities such as Boston and Lowell. Heavy precipitation and coastal flooding can overwhelm these systems and release untreated sewage to rivers and coastal waters, threatening public health and water quality.

232. In Boston alone, cumulative damage to buildings, building contents, and associated emergency costs could potentially be as high as \$94 billion between 2000 and 2100, depending on the sea level rise scenario and which adaptive actions are taken.

233. The Executive Director of the Boston Green Ribbon Commission, which is tasked with developing climate change adaptation plans for Boston, recently wrote that “even large,

affluent cities do not currently have the financial capacity in place” to pay for such plans. This finding was part of one of eighteen research papers compiled and released in October 2019 by the Federal Reserve Bank of San Francisco, which research, according to *The New York Times*, collectively constitutes “one of the most specific and dire accountings of the dangers posed to businesses and communities in the United States” by climate change.

234. As the Gulf of Maine is warming much faster than other water bodies, key cold-water ocean fisheries, including cod and lobster, that are important to the Massachusetts economy are in decline within their historic fishing grounds.

235. Climate change also adversely affects the Commonwealth’s natural resources.

236. For example, rising sea level, combined with increased erosion rates, threatens Massachusetts’ barrier beach and dune systems, since barrier beaches will be more susceptible to erosion and overwash, and in some cases, breaching.

237. Such breaching will place at risk extensive areas of developed shoreline located behind these barrier spits and islands, such as the shorelines of Plymouth, Duxbury, Kingston, Cape Cod, and Plum Island. Engineered structures, such as seawalls designed to stabilize shorelines, could be overtopped.

238. The cost of maintaining and upgrading these engineering structures and replenishing dunes and beaches damaged by erosion will increase as sea levels rise, requiring investments of millions of dollars by state and local taxpayers.

239. Large areas of critical coastal and estuarine habitat, including the North Shore’s Great Marsh—the largest continuous stretch of salt marsh in New England, extending from Cape Ann to New Hampshire—are threatened by sea level rise. Losing coastal wetlands will harm coastal ecosystems and the species that depend on them.

240. Climate change also threatens Massachusetts wildlife. The arrival of migratory birds is occurring earlier in Massachusetts, and as a result, the foods and nesting sites those birds rely upon may not yet be available. This dis-synchronicity will impede reproductive success and is predicted to lead to destabilization of certain bird populations and extinctions.

241. Trees and plants are blooming earlier, and these changes may have adverse consequences for pollination success, as well as the health of pollinator species.

242. Climate change also poses a significant and growing threat to the health and well-being of the Commonwealth's residents and results in directly-attributable physical and mental suffering and health care-related expenses.

243. Hotter temperatures in Massachusetts will increase the number, intensity, and duration of heat waves and lead to poorer air quality.

244. Warmer temperatures increase ground level ozone, which impairs lung function and results in increased hospital admissions and emergency room visits for people suffering from asthma, particularly children.

245. Currently, Massachusetts has the nation's highest incidence of pediatric asthma; among Massachusetts children in kindergarten to eighth grade, more than twelve percent suffer from pediatric asthma. About twelve percent of Massachusetts' adult population suffers from asthma. Climate change is expected to continue to worsen symptoms for people with asthma in the Commonwealth.

246. More extreme heat also increases risks associated with cardiovascular disease, Type II diabetes, renal disease, nervous disorders, emphysema, epilepsy, cerebrovascular disease, pulmonary conditions, mental health conditions, and death.

247. More frequent and more severe heat waves directly increase the risk of heat-related diseases like exhaustion and deadly heat stroke. The risk is highest for our most vulnerable citizens, for example, the very young and very old. For all ages, extreme heat events increase risk of disease and death, and place additional stress on our health care facilities.

248. Climate-change-related extreme weather events are becoming more common and threaten human health. This occurs both at the time of the event, for example through direct trauma, drowning, and structure collapse, and over longer time periods, by increasing mental health conditions, including anxiety and post-traumatic stress, and rates of suicide.

249. Extreme weather-related events in the United States impact the Commonwealth's world-class health care systems by disrupting critical supply chains and threatening catastrophic disruptions to our health care infrastructure, as occurred when Superstorm Sandy devastated leading hospitals in New York City.

250. Climate change is increasing the range of vectors (such as ticks and mosquitoes) that transmit human diseases. The incidence of vector-borne diseases, including Lyme, Rocky Mountain Spotted Fever, Zika Virus, and West Nile Virus, is rapidly increasing in the United States. In Massachusetts, those diseases include Lyme and West Nile Virus. The health impacts of these diseases can include heart dysfunction, permanent neurological injury, and death.

251. Climate change-related increases in sea surface temperatures are increasing the range of disease-causing bacteria along the coast of New England. *Vibrio* is one example. Humans may be exposed to *Vibrio* through direct contact, such as by swimming in contaminated water, or indirectly, for example, by consuming contaminated seafood. *Vibrio* species cause a range of human diseases including gastrointestinal disease and devastating skin and systemic infections, which can result in permanent disability or death.

252. The current and future climate change harms threatening Massachusetts and the massive climate adaptation costs that the state and its municipalities are facing are driven by global emissions of greenhouse gases, including from the development and use of ExxonMobil products. The delay arising from ExxonMobil’s long disinformation campaign regarding climate change exacerbated and will continue to exacerbate those climate change risks for the Commonwealth and its residents.

V. EXXONMOBIL IS DECEIVING MASSACHUSETTS INVESTORS ABOUT THE RISKS TO ITS BUSINESS FROM CLIMATE CHANGE AND RELATED REGULATION BY FAILING TO DISCLOSE THE DANGERS THOSE RISKS POSE TO THE WORLD’S FINANCIAL MARKETS AND MISREPRESENTING ITS BUSINESS PRACTICES.

253. ExxonMobil’s deception of the public about the science and risks of climate change has manifested in a distinct and self-serving disinformation campaign to persuade investors, including Massachusetts investors, that ExxonMobil securities are safer and more profitable investments over the short and long terms than other potential investments, notwithstanding ExxonMobil’s knowledge of the myriad risks that climate change poses to global populations, ecosystems, and economies, and its business model—the development, production, transportation, and sale of fossil fuels.

254. In recent years, ExxonMobil has cast itself as a conservative but proactive contributor to efforts to reduce the greenhouse gas emissions that cause climate change. The very first page of ExxonMobil’s 2017 Summary Annual Report states that “[t]here’s a dual challenge facing our industry: meeting growing demand for energy, while at the same time *reducing environmental impacts – including the risks of climate change*. It’s a challenge our industry must help solve. ExxonMobil is committed to doing our part” (emphasis added). The first page of ExxonMobil’s 2018 Summary Annual Report describes the same “dual challenge.”

255. ExxonMobil has told current and potential investors in its securities, including Massachusetts investors, that it is aware of the potential risks to its business from climate change but has taken and is taking appropriate steps to fully disclose and properly account for the risks that climate change regulation and related market transitions pose to its business. For example, in its 2014 publication, *Energy and Carbon – Managing the Risks*, ExxonMobil stated that it “takes the risk of climate change seriously, and continues to take meaningful steps to help address the risk and to ensure our facilities, operations, and investments are managed with this risk in mind.”

256. ExxonMobil has sought to reassure investors that the Company has fully accounted for the potential for rising costs and risks to its business as the world’s governments impose new regulations and pricing mechanisms that render fossil fuels increasingly uneconomic and uncompetitive relative to cleaner, less emission-intensive energy resources.

257. In these reassurances to investors, ExxonMobil has deceptively omitted, denied, or downplayed a broader set of climate change-related risks, which it understood and predicted with near-perfect foresight in the 1970s and 1980s, that threaten the world’s financial markets, the fossil fuel industry, and the Company’s business. As discussed in Section IV.C above, these risks are potentially cataclysmic for the world, with devastating economic, societal, and environmental costs.

258. The systemic risk climate change poses to the world’s financial markets is comparable to, and could well exceed, the impact of the 2008 global financial crisis, when a subprime mortgage crisis in the United States exposed that banks had taken excessive and undisclosed risks, triggering a global financial panic resulting in the deepest economic recession since the Great Depression. As ExxonMobil found in its early research, the multiple impacts of climate change include ocean acidification, species loss, and impacts to agriculture and world

food production. The interplay of such impacts will create a cascade of tipping points that could lead to the collapse of elements of human societies, including financial markets. According to Christiana Figueres, who led the U.N. Framework Convention on Climate Change during the negotiation of the Paris Agreement, “[t]he pensions, life insurances and nest eggs of billions of ordinary people depend on the long-term security and stability of institutional investment funds. Climate change increasingly poses one of the biggest long-term threats to those investments and the wealth of the global economy.”

259. A top U.S. financial regulator sitting on the Commodity Futures Trading Commission recently warned, in the same vein, that it is abundantly clear that climate change is posing financial risk to the stability of the financial system, because more frequent and extreme climate-driven weather events will make it difficult or impossible for large providers of financial products, like mortgages, home insurance, and pensions to shift risk out of their portfolios. Representatives of the central banks of England, Canada, Europe, and others have sounded similar alarms.

260. In sharp contrast with this reality, ExxonMobil’s omissions and misrepresentations to investors present a deceptive narrative of long-term growth in fossil fuel demand and minimal risk to the Company from climate change impacts. In particular, because its disclosures ignore the nature and extent of climate change risks that are systemic in nature, ExxonMobil fails to disclose that the climatic changes that its own business model exacerbates are putting the geopolitical and societal stability of civilization, and the value of the world’s financial markets, at increasing risk. These material risks that ExxonMobil fails to disclose endanger the portfolios, pensions, and retirement savings of the Company’s Massachusetts investors.

261. In addition, ExxonMobil has deliberately told investors a distinct series of falsehoods about its business planning and practices, all calculated to downplay the risks to its business and to overstate the value and economic feasibility of its business and assets in an increasingly carbon-constrained world. As discussed below, for years, ExxonMobil has systematically misrepresented the ways it is incorporating a major climate change risk—the future costs of climate change regulation—into the Company’s economic projections about its investments, the economic feasibility of its fossil fuel reserves and resource base, its valuations and assessments of when and whether its assets are uneconomic or “impaired,” and its projections of global energy demand. In particular, ExxonMobil told investors that it was employing in such analyses a high and escalating “proxy cost” of carbon when, in fact, it was applying some lower proxy cost, in some instances held flat rather than increasing, or failing to incorporate any cost of carbon at all.

262. ExxonMobil’s omissions and misrepresentations have been material because, among other things, they have been contemporaneous with a rising tide of recent efforts and advocacy by many investors, including prominently among them Massachusetts investors, described below, to secure greater disclosures of climate risks and planning from companies like and including specifically ExxonMobil.

263. ExxonMobil omitted and misrepresented material climate change risks in a manner that favored the Company’s ongoing and risky investments in some of the most emission-intensive fossil fuel projects in the world, including Canadian oil sands projects.

264. The omissions and misrepresentations allowed ExxonMobil to distort and evade the discipline of the financial markets; to put its investors, including its Massachusetts investors,

at risk of losses; and to market its securities to new and existing investors who were more likely to buy and maintain investments based on the Company's public representations.

265. As detailed below, ExxonMobil's omissions and misrepresentations to investors, including Massachusetts investors, about the systemic risks of climate change and its use of proxy costs violate Chapter 93A's proscription of deceptive statements on material matters that influence investment decisions.

A. Massachusetts Investors Are Heavily Invested in ExxonMobil.

266. ExxonMobil offers its securities, including its common stock and debt instruments, directly to Massachusetts investors.

267. ExxonMobil actively markets and sells its securities in Massachusetts to Massachusetts investors and has done so within the period from 2012 to present, as well as earlier.

268. ExxonMobil securities are also purchased and sold in public and private capital markets, including by Massachusetts investors, and ExxonMobil's statements to investors are intended to influence those transactions.

269. Massachusetts-based institutional investors and investment managers, collectively, hold millions of shares of ExxonMobil common stock worth billions of dollars, both in their own accounts and on behalf of individual investors.

270. Massachusetts-based institutional investors that hold ExxonMobil common stock include State Street Corporation and its affiliates ("State Street"), Wellington Management Group LLP and its affiliates ("Wellington"), FMR LLC and its affiliates ("Fidelity Investments"), and Boston Trust Walden Company ("Walden").

271. From at least 1999 until present, State Street has held millions of shares of ExxonMobil common stock and been one of the most significant investors in Exxon.

272. As of September 30, 2018, State Street was the third-largest institutional investor in ExxonMobil common stock, holding 208,622,266 shares with a total value of approximately \$17.7 billion.

273. From at least 1999 until present, Wellington, either under its current or former names, has held millions of shares of ExxonMobil common stock and been a significant investor in the Company.

274. As of September 30, 2018, Wellington was the fifth-largest institutional investor in ExxonMobil common stock, holding 53,342,250 shares with a total value of approximately \$4.5 billion.

275. From at least 1994 until present, Fidelity Investments, either under its current or former names, has held millions of shares of ExxonMobil common stock and been a significant investor in the Company.

276. As of September 30, 2018, Fidelity Investments was the eleventh-largest institutional investor in ExxonMobil common stock, holding 41,616,726 shares of ExxonMobil common stock with a total value of approximately \$3.5 billion.

277. Fidelity Investments offers ExxonMobil stock as part of its extensive mutual fund offerings, including, for example, its Fidelity Independence Fund.

278. From at least 2012 until present, Walden has held millions of dollars in ExxonMobil common stock.

279. As of September 30, 2018, Walden held millions of dollars in ExxonMobil common stock.

280. The Massachusetts Pension Reserves Investment Trust has a significant investment in ExxonMobil securities, purchased through its Massachusetts-based investment managers.

281. ExxonMobil and its representatives communicate regularly with institutional and other Massachusetts investors through standard securities filings with the U.S. Securities and Exchange Commission (“SEC”), earnings calls, the yearly shareholder meeting, emails, investor conference calls, and in-person meetings, among other means.

282. In recent years, ExxonMobil has sold short-term, fixed-rate notes directly to Massachusetts investors.

283. ExxonMobil also sells long and short-term corporate bonds directly to Massachusetts investors.

284. Additionally, at least since 2014, ExxonMobil, either directly or through intermediaries like underwriters, dealers, or agents, has publicly offered long-term debt instruments to investors, including investors located in or doing business in Massachusetts.

285. On March 17, 2014, ExxonMobil filed with the SEC a Form S-3 shelf-registration statement to register the offering of debt securities.

286. On March 17, 2014, March 3, 2015, and February 29, 2016, ExxonMobil filed with the SEC prospectus supplements (“2014–2016 Prospectus Supplements”) to the prospectus filed on March 17, 2014 pursuant to Rule 424(b)(2) of the Securities Act of 1933.

287. State Street and Fidelity Investments each purchased and, as of October 31, 2018, held 30-year, 10-year, 7-year, and 5-year ExxonMobil bonds that ExxonMobil had announced as part of its 2014–2016 Prospectus Supplements.

288. Wellington purchased and, as of October 31, 2018, held 7-year and 3-year ExxonMobil bonds that ExxonMobil had announced as part of its 2014–2016 Prospectus Supplements.

289. John Hancock Investment Management Services, LLC (“John Hancock”), an owner of mutual funds and based in Boston, Blue Cross Blue Shield of Massachusetts HMO Blue, Inc., a Massachusetts nonprofit corporation located in Boston, and a number of other Massachusetts-based businesses purchased and, as of October 31, 2018, held ExxonMobil bonds that ExxonMobil had announced as part of its 2014–2016 Prospectus Supplements.

290. As described in further detail below, ExxonMobil has substantial, continuing contacts with Massachusetts institutional investors and other Massachusetts shareholders with respect to climate change risks, in addition to other topics relating to the operations of the Company, its future business projects, and the overall value of the Company.

B. Climate Change Risks Threaten the World’s Financial Markets and the Holdings of Massachusetts Investors in ExxonMobil Securities.

291. Climate change risks affect the global economy, the world’s financial markets, asset owners, the fossil fuel industry, and ExxonMobil’s business, and therefore the ExxonMobil holdings of Massachusetts investors.

292. As classified in the investment community, climate change risks include “physical risks,” such as the impacts of extreme weather, heat waves, and sea level rise on physical infrastructure, and “transition risks,” such as climate change regulations and associated costs and, particularly for fossil fuel companies like ExxonMobil, market shifts away from fossil fuels to cleaner energy resources.

293. Energy companies, including fossil fuel companies like ExxonMobil, face both physical and transition risks from climate change. In the parlance of the Financial Stability

Board’s Task Force on Climate-related Financial Disclosures, such physical risks include the “acute” risks of increasingly severe extreme weather events and the “chronic” risks of changing precipitation, weather patterns, rising mean temperatures, and rising sea levels. These physical risks threaten to reduce revenues, increase costs, and put company assets at risk of devaluation or write-offs. Transition risks to energy companies include “policy and legal” risks, “technology” risks, “market” risks, and “reputation” risks, as the world increasingly prices greenhouse gas emissions, regulates existing products and services, substitutes existing products with lower emission alternatives, shifts consumer choices away from fossil fuel products and services, and sees increased stigmatization of the fossil fuel sector. These transition risks threaten to increase costs, reduce demand for fossil fuel products and services, diminish available capital, and trigger asset re-pricing, write-offs, and impairments, as well as early retirement of existing facilities.

294. As set forth in Paragraphs 217 through 219 above, credible estimates of the total global costs of climate-related physical and transition risks have reached many trillions of dollars and up to 30 percent of all manageable assets, in net present value terms. Climate change also threatens global and national economic output, with potential reductions in output exceeding reductions experienced during the Great Depression and widely exceeding those during the more recent Great Recession.

295. Risks on this scale threaten the stability of the world’s financial markets now and in the future, especially because of the scope, scale, and systemic nature of likely and potential climate change impacts. Such risks also threaten economic and geopolitical stability more generally, including by increasing the risk of armed conflicts and their terrible economic consequences throughout the world. These threats may also be nonlinear in nature in that steadily increasing climate change impacts may cross “tipping points” and trigger abrupt, severe, and

even catastrophic changes to financial and social systems. For the purposes of this Complaint, these threats to societal and financial market stability are referred to collectively as “systemic risks.”

296. A current member of the U.S. Commodity Futures Trading Commission recently commented that the financial risks from climate change are comparable to those posed by the failures of mortgage financing that triggered the 2008 global financial crisis: “If climate change causes more volatile frequent and extreme weather events, you’re going to have a scenario where these large providers of financial products—mortgages, home insurance, pensions—cannot shift risk away from their portfolios... It’s abundantly clear that climate change poses financial risk to the stability of the financial system.”

297. In March 2019, the Federal Reserve Bank of San Francisco published an “Economic Letter” discussing the “increasing financial risks from climate change,” highlighting that many financial firms have “substantial climate-based credit risk exposure.” If “broadly correlated across regions or industries,” the Letter concluded, “the resulting climate-based risk could threaten the stability of the financial system as a whole and be of macroprudential concern.”

298. On April 17, 2019, in an open letter to the world’s financial markets that accompanied the public release of a report recommending steps that the financial sector should take to address climate risks, the Governor of the Bank of England, Mark Carney, and the Governor of Banque de France, François Villeroy de Galhau, summarized these risks as follows:

The catastrophic effects of climate change are already visible around the world. From blistering heatwaves in North America to typhoons in south-east Asia and droughts in Africa and Australia, no country or community is immune. These events damage infrastructure and private property, negatively affect health, decrease productivity and destroy wealth. And they are extremely costly: insured losses have

risen five-fold in the past three decades. The enormous human and financial costs of climate change are having a devastating effect on our collective wellbeing.

The impact of climate change has compelled governments to act. Catalysed by the Paris agreement, governments around the world are putting policies in place to limit the global rise in temperatures to 2C, and preferably as close to 1.5C as possible. The actions undertaken by individual countries will deliver a collective transition to a low-carbon economy. But this transition brings its own risks. Carbon emissions have to decline by 45% from 2010 levels over the next decade in order to reach net zero by 2050. This requires a massive reallocation of capital. If some companies and industries fail to adjust to this new world, they will fail to exist.

The prime responsibility for climate policy will continue to sit with governments. And the private sector will determine the success of the adjustment. But as financial policymakers and prudential supervisors, we cannot ignore the obvious risks before our eyes. . . .

[T]o support the market and regulators in adequately assessing the risks and opportunities from climate change, robust and internationally consistent disclosure is vital. . . .

We recognise that the challenges we face are unprecedented, urgent and analytically difficult. The stakes are undoubtedly high, but the commitment of all actors in the financial system to act on these recommendations will help avoid a climate-driven “Minsky moment” – the term we use to refer to a sudden collapse in asset prices.

The organizer of the Network for Greening the Financial System, a coalition of 34 central banks and supervisors representing five continents, half of global greenhouse gas emissions, and the supervision of two-thirds of the global systemically important banks and insurers, joined the letter.

299. In May 2019, the Bank of Canada issued its annual Financial System Review, identifying climate change as one of the key vulnerabilities in the Canadian financial system, stating that “[c]limate change continues to pose risks to both the economy and the financial system. These include physical risks from disruptive weather events and transition risks from

adapting to a lower-carbon global economy.” Of particular concern, according to the Bank of Canada, is that “asset prices may not fully reflect carbon-related risk”:

If assets are mispriced, correct incentives will not be in place to manage and mitigate risks. Rapid repricing might cause fire sales and interact with other vulnerabilities—like excessive leverage—destabilizing the financial system. Better transparency could help alleviate this risk.

300. Also in May 2019, the European Central Bank (“ECB”) published its semiannual Financial Stability Review, with a special feature on climate change risks to the financial system. It likewise sounded the alarm that physical risks could “erode collateral and asset values” so significantly that “there is a risk that certain losses may become uninsurable.” As to transition risks, the ECB warned that the affected firms and sectors could experience “abrupt asset price decreases,” leading to “uncertainty” and “procyclical market dynamics, including fire sales of carbon-intensive assets, and potentially also liquidity problems,” as well as increased credit risk as carbon-intensive firms lose profits and potentially default on their debts.

301. In September 2019, the United Nations-supported Principles for Responsible Investment (“PRI”) investor initiative, which comprises over 2,000 institutional investors and investment firms around the world, with over \$80 trillion in assets under management, released research showing that “[f]inancial markets today have not adequately priced-in the likely near-term policy response to climate change,” leaving investor portfolios exposed to significant risks. In reaching this conclusion, PRI forecasted that, “as the realities of climate change become increasingly apparent, it is inevitable that governments will be forced to act more decisively than they have so far . . . [with] a response by 2025 that will be forceful, abrupt, and disorderly”

302. In 2018, the international non-profit CDP (formerly the Carbon Disclosure Project), in its annual questionnaire to the world’s companies, requested all respondents to provide a quantitative figure for the potential financial impact of risks and opportunities from

climate change, consistent with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures. In 2018, 215 of the world's largest companies, with a combined market capitalization of \$16.95 trillion, reported to CDP a potential financial impact from climate-related risks of almost \$1 trillion.

303. Systemic risk to financial markets is not a distant threat and is already evident in impacts to U.S. housing and municipal bond markets. Home insurers have ceased underwriting home insurance in certain communities following extreme climate-driven weather events, with significant financial risk implications for home mortgage providers. A recent report concluded that several U.S. municipalities face significant climate risk that could affect credit ratings, due to lost property tax and other revenue. For example, after Hurricane Harvey, Moody's downgraded Port Arthur due to a "weak liquidity position that is exposed to additional financial obligations from the recent hurricane damage, that are above and beyond the city's regular scope of operations," and after Hurricane Katrina, S&P Global Ratings downgraded New Orleans due to considerable emigration and an associated 22 percent decline in taxable assessed value.

304. Because the systemic risks identified above threaten the entire fossil fuel industry and also the world's financial markets, they directly threaten the holdings of Massachusetts investors in ExxonMobil securities.

C. The Long-term Value of ExxonMobil's Business and Reserves Is at Risk from Climate Change, Including from Regulatory and Market Responses.

305. Although enormously lucrative over time, the success of ExxonMobil's business has depended on a world overwhelmingly reliant on fossil fuels. The risks of climate change and regulatory responses to it pose an existential threat to that business model and therefore to investments in ExxonMobil securities, including by Massachusetts investors.

306. ExxonMobil's own greenhouse gas emissions pose significant risks to its business because, among other things, increasing regulation and pricing of those emissions by governments around the world to mitigate global climate change will, at minimum, increase ExxonMobil's costs of developing and operating its businesses and may also limit ExxonMobil's legal and economic ability to extract hydrocarbons from existing and planned facilities—threatening the value of its reserves and resource base, on which its market capitalization depends.

307. In addition, governmental action to regulate and price emissions will reduce market and customer demand for ExxonMobil's fossil fuel products. At the same time, cleaner energy businesses with lower or no greenhouse gas emissions will increasingly gain a competitive advantage over ExxonMobil's fossil fuel businesses.

1. Fossil fuel companies like ExxonMobil face escalating regulatory and market responses to climate change, which are necessary to avert catastrophic warming.

308. By 2007, ten governmental entities including the European Union had adopted policies, regulations, taxes, or other fees imposing a cost on greenhouse gas emissions. By 2014, the number had grown to 36, and in 2019 to 57, throughout the world. These initiatives would cover at least 11 gigatons of CO₂ equivalent greenhouse gas emissions, or about 20 percent of global emissions. In 2018, the total value of such emission pricing mechanisms was about \$82 billion, representing a 56 percent increase compared to the 2017 value of \$52 billion.

ExxonMobil has operations in many of these jurisdictions, including the European Union, Canada, and California, increasingly subjecting ExxonMobil's operations to additional costs from greenhouse gas regulations. These mechanisms also tend to shift demand for energy to less emission-intensive fuel sources, and thus away from ExxonMobil's fossil fuel resources, putting ExxonMobil's core business revenues at risk.

309. These efforts to put a price or other regulatory controls on greenhouse gas emissions gained significant momentum when, in 2015, the nations of the world adopted the Paris Agreement, which aims to keep the global temperature increase well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit it to 1.5 degrees Celsius. The Paris Agreement requires that each participating nation formulate a nationally determined contribution and a plan to reduce greenhouse gas emissions and pursue domestic measures to achieve that contribution. 186 nations and the European Union, representing nearly 97 percent of global greenhouse gas emissions, have ratified or acceded to the Paris Agreement, and a further 10 parties have signed but not ratified or acceded to the agreement.

310. The United States is a party to the Paris Agreement through at least 2020, notwithstanding the current federal administration's stated intent to withdraw from the agreement. In recent years, numerous states, including states where ExxonMobil maintains operations, have enacted increasingly aggressive measures to reduce greenhouse gas emissions. States with forty percent of the U.S. population have joined the U.S. Climate Alliance, committing to implementation of policies to meet the Paris Agreement goals for reducing carbon pollution and advancing clean energy.

311. As discussed in Paragraph 301 above, PRI recently forecast that major further policy responses to price or reduce greenhouse gas emissions are very likely by 2025 and ultimately "inevitable."

312. Governments' current and future efforts to reduce greenhouse gas emissions through regulation and/or the impositions of carbon fees or taxes, including under the Paris Agreement, present meaningful risks to the demand for ExxonMobil's products and the overall economics of its business. For example, as the IPCC Fifth Assessment report noted in 2014,

“[m]itigation policy could devalue fossil fuel assets and reduce revenues for fossil fuel exporters, but differences between regions and fuels exist. . . . Most mitigation scenarios are associated with reduced revenues from coal and oil trade for major exporters.”

313. In particular, as discussed in Section IV.C above, limiting global temperature increases to the objectives of the Paris Agreement will mean that substantial portions of the world’s known fossil fuel reserves cannot be burned. That reality poses significant risks to the shareholders of fossil fuel companies. These investors face the obvious risk of assets—existing facilities and known reserves—being stranded as demand for fossil fuels decreases in a scenario where the world transitions to a low carbon future.

314. ExxonMobil’s ongoing investment in fossil fuel assets appears to reflect and reinforce the trend across the fossil fuel industry, in which planned production growth rates are on average about ten percentage points above the level of oil and gas demand projected by the International Energy Agency. As discussed in more detail in Section V.B, investors also face risk from continued overinvestment in fossil fuels under a business as usual scenario, since the failure to transition to a low carbon economy means not only humanitarian crises and ecological destruction from climate change, but also the devastating financial costs of large scale, global climate disruption.

315. Outside the fossil fuel industry, however, the deployment of clean energy technologies is accelerating around the world, and the costs of those technologies are declining. Nationwide, installed wind and solar power in the United States more than *quintupled* from 2008 to 2018. Wind alone provided a record 6.5 percent of the nation’s electricity needs in 2018. Since 2009, the levelized cost of energy for wind power has fallen 69 percent, to as low as 2.9

cents/kilowatt-hour, with long-term contracts now available at *average* prices of 2 cents/kilowatt-hour.

316. This trend toward clean energy resources can have devastating economic impacts on energy companies that fail to adapt and on their investors. Between 2015 and 2018, for example, General Electric lost a reported \$193 billion, almost three-quarters of its market capitalization, following major declines in its coal and natural gas power generation businesses. Those businesses are now effectively stranded because they failed to account for growth in renewable energy and energy efficiency and the decoupling of coal and natural gas demand from economic growth.

317. These market trends away from fossil fuels are economically inconsistent over the long term with the development of additional or costly fossil fuel resources, including ExxonMobil's oil sands projects.

2. *ExxonMobil's most valuable assets are its fossil fuel resources.*

318. The total estimated amount of oil or gas in a hydrocarbon reservoir is referred to as the volume of the hydrocarbon "in place." Only the fraction of the hydrocarbons in place that is technologically and commercially feasible to recover can be classified as "reserves" on a company's financial statements as that term is defined by the oil and gas industry, accounting standards, and financial regulators.

319. Oil and gas reserves represent the future cash flow of an upstream oil and gas business. Accordingly, the successful discovery, development, production, and ongoing replacement of oil and gas reserves are all critical factors influencing the long-term financial health of an oil and gas company with an upstream business.

320. Over the near term, investors and market analysts use the reserve amounts reported by oil and gas companies to value their upstream businesses and to predict their revenue

and earnings. Reserve quantities, types, and replacement ratios can have significant effects on an oil and gas company's stock price and bond ratings.

321. As defined by the SEC and the Financial Accounting Standards Board, "proved reserves" are the amount of hydrocarbons in a particular reservoir which geologic and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions, and this amount is disclosed as "proved reserves" in oil and gas companies' public financial statements.

322. Depending on changing economic conditions, including higher than previously expected future costs, previously-classified proved reserves may become not economically producible. If any of the company's proved reserves no longer qualify as "proved" based on economic conditions at the end of the new reporting period, the company must disclose a revision of the previously estimated quantity of proved reserves. This revision is often referred to as a "de-booking" of proved reserves.

323. Proved reserves are a primary indicator of a fossil fuel company's value and are correlated with the company's market capitalization. As oil, gas, and other fossil fuel products making up those reserves are extracted and sold, the company's reserves are correspondingly reduced. Therefore, a company's ongoing replacement of proved reserves is critical to the company's long-term ability to continue or grow its output and sales of fossil fuels.

324. An oil and gas company's proved reserves represent a subset of its total oil and gas "resources," or "resource base." ExxonMobil defines and reports to investors its resource base as "the total remaining estimated quantities of oil and gas that are expected to be ultimately recoverable, which includes quantities of oil and gas that are not yet classified as proved reserves under SEC definitions, but that [it] believes will ultimately be developed." The resource base

includes so-called “company reserves,” which are calculated based on internal guidelines rather than under SEC rules. ExxonMobil’s “resource base” is particularly significant because it represents the main source of potential future additions to proved reserves.

325. While SEC proved reserves estimates must be based on historical oil and gas prices and current costs, company reserves and resource base assessments are based on a company’s own internally-determined price and cost projections.

326. Where oil and gas assets are listed in ExxonMobil’s financial reports, whether as proved reserves or other resources, the company’s economic ability to recover them is affected by changes to market conditions, project costs, technological advancements, or other factors. To assess the impact of those changes on the value of its assets, ExxonMobil must conduct evaluations on at least an annual basis, consistent with applicable accounting standards, to test whether its assets are “impaired,” i.e., that any given asset’s undiscounted future cash flows are less than its carrying value. Where such evaluations determine that assets are “impaired,” the company must “write down” the asset to its fair market value and take an impairment charge for the difference between that value and its book value, reducing its reported earnings for that reporting period.

3. *ExxonMobil’s 2017 de-booking and impairments of fossil fuel assets illustrate the material risks to investors inherent in the Company’s costly and polluting fossil fuel investments.*

327. In recent years, ExxonMobil has invested many billions of dollars in developing new hydrocarbon resources, despite low oil prices and the world’s diminishing carbon budget, discussed above, and the consequent imperative, reflected in the Paris Agreement and other governmental actions around the world, for the global economy to make drastic reductions in fossil fuel use.

328. ExxonMobil has staked its business model on these new investments, even as their value is highly sensitive to changes in the changing global market for fossil fuels. As discussed below, recent events show that ExxonMobil's costliest and most carbon-intensive projects are economically marginal in the current market, and ExxonMobil has sought to avoid and delay acknowledging to investors that the value of these assets is at risk.

329. In particular, ExxonMobil has spent billions of dollars on investments in Canadian oil sands projects operated by its majority-owned subsidiary, Imperial Oil.

330. Canadian oil sands require more energy to exploit than conventional oil resources and therefore generate 17 percent more greenhouse gas emissions, according to a recent U.S. State Department estimate. Accordingly, oil sands assets are more sensitive to the requirements and costs of climate-change regulation than other oil assets. Oil sands also are generally costlier to exploit than conventional oil resources, meaning that companies need to obtain a higher oil price in the market to recover their costs.

331. Together with Arctic oil resources, oil sands are at the end of the global supply curve, meaning that other supplies are more economic and will tend to serve global oil demand first. In a world where the quantity and trends in global oil demand are uncertain as fossil fuel alternatives and greater energy efficiency gain ground, and global oil markets may not require oil sands supplies to meet that demand, the economics of long-term investments in oil sands are highly vulnerable to relatively small variations in project costs and demand projections. These investments are therefore at a higher risk of being "stranded" by either escalating costs, such as from climate regulations, or insufficient oil demand, based on the world's needed transition to cleaner energy sources, in the future.

332. Investors recognize that investments in oil sands and similarly costly types of reserves pose a risk to ExxonMobil financially, especially if oil prices remain flat or decline.

333. ExxonMobil invested more than \$20 billion in capital expenditures at its open-pit oil sands mining operation at Kearl Lake in Alberta, Canada (“Kearl”)—its single largest investment in Canadian oil sands resources. Kearl is comprised of six oil sands leases covering about 75 square miles, in the Athabasca oil sands deposit. Raw bitumen from Kearl is mined, crushed, chemically cleaned, heated, and processed on site, and then diluted with a blend of petroleum diluent and shipped via pipeline or rail, including to refineries owned and operated by ExxonMobil or its subsidiaries in Canada or the United States. By 2015, the 3.6 billion barrels of purportedly proved reserves at Kearl represented approximately 14 percent of ExxonMobil’s claimed proved reserves worldwide.

334. ExxonMobil’s Canadian oil sands assets also constitute a significant amount of ExxonMobil’s resource base.

335. Alberta implemented the Specific Gas Emitters Regulation in 2007, mandating a 12 percent reduction in greenhouse gas emissions intensity from large industrial facilities, including oil sands facilities. Any emissions beyond the threshold for regulation were subject to a \$20 CDN per ton CO₂-equivalent tax, increasing to 20 percent reduction and \$30 CDN per ton beginning January 1, 2018. Alberta recently replaced the Specific Gas Emitters Regulation with the Carbon Competitiveness Incentive Regulation, which requires accelerating reductions in emissions from high-emitting industries like oil sands facilities and similar compliance options as the prior regulation, including purchasing credits for excess emissions of \$30 CDN per ton.

336. Investors have often asked ExxonMobil detailed questions about the performance and risk profile of individual investments, including Kearl and other oil sands assets.

ExxonMobil presented information about Kearn specifically at each of its last eight annual analyst meetings in New York City.

337. In mid-2014, global oil market prices began a rapid fall. By early 2016, prices had declined 70 percent, one of the largest and most sustained oil price declines in modern history. Significant factors included oversupply and weakening demand for oil.

338. Lower oil prices resulted in significant reserve de-bookings and impairments across the oil industry during 2015 and 2016.

339. Through the fall of 2016, ExxonMobil bucked the trend of fossil fuel company de-bookings and impairments and repeatedly asserted that there were no reductions in its reserves or resource base or impairments of its assets.

340. In August 2015, Mr. Tillerson stated in an interview that “[w]e don’t do write downs. If you look at our history, we do not write our investments down. A lot of other people are very quick to want to write things down because it kind of improves things going forward [W]e are not going to bail you out by writing it down. That is the message to our organization. They all understand that.”

341. In February 2016, ExxonMobil stated in its 10-K filing for 2015 that it “does not view temporarily low prices or margins as a trigger event for conducting impairment tests.” Nonetheless, ExxonMobil reported that “in late 2015, the Corporation undertook an effort to assess its major long-lived assets most at risk for potential impairment,” and that the “assessment . . . indicate[d] that the future undiscounted cash flows associated with these assets substantially exceed the carrying value of the assets.” In addition, the 2015 Form 10-K stated that “Management views the Corporation’s financial strength as a competitive advantage,” and further stated (emphasis added):

The Corporation has an active asset management program in which underperforming assets are either improved to acceptable levels or considered for divestment. The asset management program includes a disciplined, regular review to ensure that all assets are contributing to the Corporation's strategic objectives. The result is an efficient capital base, and *the Corporation has seldom had to write down the carrying value of assets, even during periods of low commodity prices.*

342. ExxonMobil referred investors to the position on potential impairments in its 2015 10-K as late as mid-September 2016.

343. In March 2016, ExxonMobil completed a \$12 billion public debt offering, in part to fund its capital investment plans in new fossil fuel resources around the world. As discussed above in Section V.A, Massachusetts investors were among the buyers of ExxonMobil's debt securities during this offering.

344. In April 2016, ExxonMobil lost its AAA credit rating, a rating it had held since the Great Depression. In the downgrade, Standard and Poor's stated that the "company's debt level has more than doubled in recent years, reflecting high capital spending on major projects in a high commodity price environment and dividends and share repurchases that substantially exceeded internally generated cash flow."

345. As late as September 2016, an analyst at Fidelity Investments recognized ExxonMobil's ability to avoid write-downs as a positive trait: "XOM has had the best returns in the sector, and has not taken write-downs – therefore, it does not appear over capitalized."

346. On October 28, 2016, ExxonMobil issued an earnings release announcing its financial results for the third quarter ended September 30, 2016. In the release, ExxonMobil disclosed that nearly *twenty percent* of the Company's proved oil and gas reserves, including those associated with the Kearl oil sands operations in Canada, might no longer satisfy the SEC's

“proved reserves” definition at year-end, which would require such assets to be “de-booked” as proved reserves.

347. On February 22, 2017, ExxonMobil announced its 2016 year-end reserves in a press release, confirming that *all* of its proved reserves at Kearl were being de-booked:

As a result of very low prices during 2016, certain quantities of liquids and natural gas no longer qualified as proved reserves under SEC guidelines. These amounts included the entire 3.5 billion barrels of bitumen at Kearl in Alberta, Canada.

In total, as of December 31, 2016, as it first forecast in October 2016, ExxonMobil had de-booked nearly twenty percent of its total global proved reserves at the end of 2015.

348. On May 24, 2017, S&P Global Ratings issued a negative outlook on ExxonMobil’s credit, citing “higher-than-previously expected leverage.”

349. More recently, in August 2019, ExxonMobil lost its position among the top-ten largest companies on the S&P 500 index for the first time in the index’s nearly ninety-year history, a sign of its significant underperformance relative to the overall market. In 2009, the Company was the top company on the index, comprising five percent of its market value.

350. The recent track record of ExxonMobil’s oil sands investments illustrates the high sensitivity of the Company’s recent hydrocarbon projects to material financial risks over the short and long terms, including higher-than-expected costs, lower-than-expected demand and prices, and increasing climate risks, as well as management’s practice of downplaying the risks to its projects—and overstating their future returns—for as long as possible.

4. *Energy companies use a proxy cost of carbon to account for anticipated costs of future climate change policy.*

351. According to a 2017 report by CDP, an internal carbon price is used by companies representing 79 percent of the market capitalization of the energy sector, more than any sector other than the utility sector. The energy sector has “more exposure to material risk

related to the use of fossil fuel–based energy” and “fundamentally rel[ies] on the extraction and combustion of fossil fuels, leaving [it] exposed to carbon asset risks—investments and reserves that may never be economic to use or extract in the future.” To address this risk, many companies in the energy sector “have been measuring carbon risks as a part of every-day business for several years.”

352. An internal carbon price is a type of “proxy cost,” i.e., a cost that is included in economic projections as a proxy, or stand-in, for the likely effects of expected future events.

353. To take one example of how a proxy cost of carbon should influence company planning, a proxy cost increases the company’s projection of the costs of any project with associated greenhouse gas emissions over the planned life of the project. All other things being equal, use of a proxy cost should make projects with higher emissions less favorable for company investment than projects with lower emissions. In the case of future upstream oil and gas projects that rely on company reserves, the use of a proxy cost may influence the economics underlying the classification of those reserves as “proved” or some other classification.

354. A proxy cost of carbon also affects the fair value calculations underlying the determination of whether a company asset is “impaired” and/or certain conditions exist that would trigger an impairment evaluation in the first place.

355. As distinct from the use of a proxy cost of carbon in assessing the future costs associated with project-related greenhouse gas emissions, a proxy cost also is used as an important input to a company’s macroeconomic projections of energy demand and energy pricing. These projections, in turn, also affect expectations of project viability.

356. Applying a proxy cost of carbon changes the relative prices of energy alternatives and can shift projected demand away from oil and other high-carbon fuel sources towards lower-

emission resources. For example, the use of a proxy cost of carbon in such projections would increase the price of (and therefore depress consumer demand for) gasoline and diesel fuel, incentivizing consumers to travel less or to shift toward electric vehicles, ride-sharing, and public transit. Likewise, the use of a proxy cost of carbon would increase the projected price of and depress the demand for heating oil, boosting the market for cleaner space-heating options, such as investments in efficient boilers and electric air-source heat pumps.

357. By way of illustration, given the carbon dioxide emissions associated with gasoline, a proxy cost of \$80 per metric ton of carbon dioxide adds \$0.71 to the projected price of each gallon of gasoline.

358. Economic modeling of energy demand incorporating a proxy cost of carbon should therefore show lower demand for oil than modeling without such a proxy cost, particularly when cleaner energy alternatives cost less or oil demand is elastic (i.e., oil users elect to consume less in response to higher prices), diminishing projected returns and project viability of the most expensive resources. With decreasing demand for oil, the most expensive projects to develop would become stranded assets, and therefore be removed from estimates of economic reserves and resources.

359. As discussed below, ExxonMobil has represented to investors, including Massachusetts investors, that, since 2007, it has used a proxy cost of carbon and other greenhouse gas emissions to account for the future costs of climate-change regulation in its business planning (including in projecting energy demand), investment decisions, reserve calculations, and impairment evaluations, when in fact ExxonMobil failed to do so consistently with its representations.

D. Massachusetts Investors Have a Strong Interest in Accurate Disclosure of Climate Change Risks to the World’s Financial Markets, the Fossil Fuel Industry, and ExxonMobil’s Business and Assets.

360. ExxonMobil’s omissions and misrepresentations regarding climate risks, detailed below, are material in that they influence investment decisions by Massachusetts investors and others, especially because they are occurring at a time of (i) waves of financial pressure on the most costly oil and gas projects, which cascade through the various measures companies and investors use to evaluate the financial health of their assets, (ii) growing investor attention to climate change risks and advocacy for greater disclosure of and responses to those risks by companies, especially fossil fuel companies with high levels of sensitivity to climate change regulation and/or to climate change impacts, and (iii) significant investor engagement with ExxonMobil in particular over its exposure to climate change risks, including by Massachusetts-based investors.

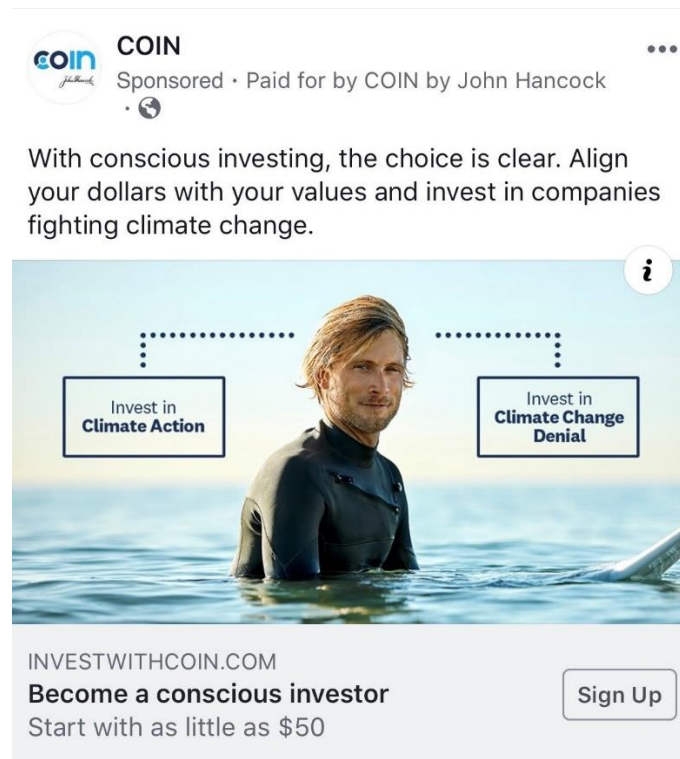
1. Climate risks are important and material to Massachusetts investors, including Massachusetts investors in ExxonMobil securities.

361. Climate risk disclosures have been an increasing focus of investors, including both the investment community as a whole and the substantial group of investors focused on the environmental, social, and governance (“ESG”) factors informing investment decisions. According to a recent estimate, ESG-focused investing now includes over \$30.7 trillion in assets under management. U.S.-domiciled assets using ESG strategies in 2018 were valued at \$12 trillion, comprising 26 percent of the assets under professional management in the United States in that year.

362. Massachusetts investors, including firms like Walden, Arjuna Capital (“Arjuna”), Calvert Research and Management (a subsidiary of Eaton Vance), Green Century Capital Management, and Trillium Asset Management, are at the vanguard of ESG investing. Major

Massachusetts institutional investors like State Street, Wellington, Fidelity Investments, and John Hancock have ESG funds and are integrating ESG factors into their investment decisions and guidance to client investors, across all asset classes.

363. For example, John Hancock recently launched a “conscious investing platform” named “COIN” that provides investors a “personalized mix of companies whose impact is aligned with their values” based on “extensive review on how well [the companies’] goals, business revenues, and corporate conduct support positive change” on, among other issues, “climate action.” To market this platform to investors, John Hancock has advertised this offering on social media as a means of “invest[ing] in companies fighting climate change” and “climate action” as opposed to “invest[ing] in climate change denial,” with the post reproduced below.



364. In addition, over 2,000 institutional investors and investment firms around the world, with over \$80 trillion in assets under management, have signed the United Nations-supported PRI. The signatories include major ExxonMobil investors, including State Street,

Wellington, and Fidelity Investments. By signing the PRI, these firms have committed to incorporate ESG issues into their investment analysis and decision-making, and climate change is the “highest priority” among these issues.

365. As affirmed by a growing body of peer-reviewed analysis, ESG factors that are important to an industry, such as climate risk management in the energy sector, are material to company financial performance, valuation, and investment outcomes. In the words of the Sustainability Accounting Standards Board, “[r]esearch and market evidence continues to show the connection between sustainable business practices and market performance. In response, a number of initiatives have emerged to spur businesses to improve their climate-related performance, their climate-related disclosure, or both.”

366. Accurate disclosure of climate change risk and related data is critical to investors so that they can make informed investment decisions.

367. Institutions, pension funds, sovereign wealth funds, and mutual funds with \$96 trillion of invested capital support the preeminent annual survey of global companies regarding their greenhouse gas emissions and strategies for addressing climate change administered by CDP.

368. Ratings agencies, like S&P Global Ratings, consider environmental factors material to their ratings analysis for integrated oil companies.

369. The need for accurate disclosure relates not only to climate-related risks that will manifest over the long term but also those that are currently occurring and will occur in the near-term.

370. The Financial Stability Board’s Task Force on Climate-related Financial Disclosures has issued guidance on how to integrate climate risk and opportunities into corporate

financial reporting. In particular, following the Paris Agreement, the Task Force developed and published in 2017 a standardized framework for climate-related financial disclosure. The Task Force specifically highlighted the near-term nature of the risk to oil and gas companies as a driving force behind the importance of climate risk disclosure.

371. In 2018 and 2019, CDP's questionnaire sought quantitative and other climate risk information aligned with the Task Force's recommendations. After reporting to CDP in prior years, ExxonMobil did not respond to CDP's questionnaire in 2018 or 2019.

372. Dissatisfied with the fossil fuel industry's, including ExxonMobil's, response to climate change risks, more than 1,000 institutional investors with \$8 trillion in assets have made the choice to divest their positions in fossil fuel companies. These investors include the sovereign wealth fund of Norway, New York City's and London's pension funds, colleges, universities, philanthropic foundations, museums, and religious institutions.

373. For example, the University of California announced in September 2019 that its \$13.4 billion endowment and \$70 billion pension fund would sell all fossil fuel holdings because, their managers said, "hanging on to [such] assets is a financial risk" and such investments "posed a long-term risk to generating strong returns for [the University's] diversified portfolios."

374. Insofar as they damage companies' reputations for their social responsibility and environmental stewardship, and thus their societal "license to operate," divestment efforts pose an additional climate-related risk to oil and gas companies.

375. In 2018, an oil major that competes with ExxonMobil acknowledged that divestment campaigns and related efforts pose a material risk to its business and the price of its securities.

376. And in July 2019, the Secretary General of the Organization of the Petroleum Exporting Countries stated in a meeting of the group that, as extreme weather events linked to the climate crisis become more common, “there is a growing mass mobilization of world opinion . . . against oil,” which is “perhaps the greatest threat to our industry going forward,” and was beginning to “dictate policies and corporate decisions, including investment in the industry.”

377. Investors recently have divested their holdings in ExxonMobil in particular. In June 2019, for example, Legal & General Group, an ExxonMobil shareholder with over \$1 trillion in total assets under management and approximately \$2 billion in ExxonMobil holdings as of March 2019, began to divest from ExxonMobil in 19 of the firm’s funds and to ask its clients to divest additional holdings. According to a Legal & General representative, its divestment was to “hold Exxon[Mobil] accountable for something that’s really material for their future.”

378. ExxonMobil’s shareholders and bondholders, including Massachusetts-based investors, often hold ExxonMobil securities for long periods of time and are concerned with the financial health of the Company and returns on their investments over both the short and long terms.

379. ExxonMobil markets its securities to long-term investors with the constant refrain that the Company is focused on creating “long-term shareholder value.”

380. For example, Mr. Tillerson told market analysts in 2016 that “[w]e really are trying to undertake the most attractive opportunities that we see, thinking about them in terms of 30 years. . . . [W]e are not for the short term shareholder, necessarily. That’s not what we build the business around. It’s not how we run the business. We run the business for people that are

going to own these shares a very long time, that we hope the shares are in the trust that they leave their children and their grandchildren.”

381. With focus on both short- and long-term value, major Massachusetts institutional investors have called for companies to treat climate-related risks as they would any other material risk and for disclosure to investors of relevant information regarding those risks and companies’ plans for successfully managing them.

382. According to a 2017 publication by State Street’s investment management division, “boards should regard climate change as they would any other significant risk to the business and ensure that a company’s assets and its long-term business strategy are resilient to the impacts of climate change. . . . As a long-term investor, [State Street] expects boards, particularly in high-impact sectors, to consider climate risk as they would any other material risk to the sustainability of their business. We believe that *it is important for these companies to give investors information that is relevant in helping them gain comfort that climate risk is being managed by the board*” (emphasis added).

383. State Street’s investment managers stated in the 2017 publication that the way that companies integrate climate risk into long-term strategy is “particularly important” in the oil and gas sector “where long investment horizons could render assets stranded.” They also asserted that the “[c]osts of controlling emissions to meet targets should be considered when making capital allocation decisions to arrive at the true cost of an asset.” The State Street managers also stated that “carbon price assumptions are important” because they “provide insights into how companies account for climate risk in the planning process” and “are key in helping companies identify potential stranded assets and mitigate the risk of investing in assets that may become stranded in the future.”

384. In the parlance of the 2017 publication, State Street’s investment managers consider ExxonMobil a “high-impact sector” company. State Street called on ExxonMobil and other such companies to “disclos[e] the average and range of carbon price assumptions” and “discuss[] impacts of scenario-planning on long-term capital allocation decisions.” State Street shared the publication containing these statements with ExxonMobil through email.

385. In the words of a State Street senior managing director who is its head of ESG Investments and Asset Stewardship, State Street is “trying to mitigate ESG risk” and engages with investee companies “to understand the impact of board discussion around climate change on long-term strategy and capital allocation.” According to this State Street director, investors inquiring with State Street about the firm’s offerings are increasingly asking that ESG concerns like climate risk be “integrated into [their] entire portfolio[s]” because “it isn’t about ESG for the sake of ESG—it’s the material risk posed by ESG.”

386. With respect to fixed-income securities, the State Street director said that “[w]hen something ESG-related does go wrong, it can severely impact the return of your bond. Particularly with long-term bonds, the probability of something going wrong over a long horizon is high if the risk is not mitigated or properly managed.” The State Street director has also explained that engagement with companies regarding ESG occurs “at the time we make the decision to invest.”

387. State Street’s focus on ESG risk is not limited to long-term, fixed-income investments, however. The State Street director has explained that “ESG risks are as important to shareholders as they are to bondholders,” and “ESG scores are going to be as important in driving investor dollars into shares as credit scores are for fixed income.”

388. Wellington likewise is focused on climate change as a material investment risk. According to the CEO of Wellington, “[w]e see it as our fiduciary duty to take into consideration issues that may impact the immediate or long-term financial performance of our clients’ portfolios. Climate change is one of many themes that falls into this category.” Wellington recently announced an initiative with the Woods Hole Research Center to integrate climate science and asset management, with a focus on “creating quantitative models” to analyze the effects of climate change on the world’s financial markets” and “developing investor tools and innovative analytical methods seeking to improve climate risk assessment and investment outcomes.”

389. A fixed-income analyst at Fidelity Investments recognized the impact that climate-related risks could have on ExxonMobil in particular. In one report from September 2016, a Fidelity Investments analyst wrote in a “Liquidity Update” on ExxonMobil: “Economic factors, climate change policies and changing technology could all have a negative impact on demand for energy (oil, gas, LNG) We are monitoring demand trends carefully – this is an area of concern for us over the next 5 years.”

390. Fossil fuel companies’ disclosures of climate risk also may affect the value of securities that are held over short timeframes, because market responses to such disclosures may contribute to lower market capitalization, bond rating changes, and altered perceptions of such companies’ creditworthiness.

2. *ExxonMobil’s Massachusetts investors and the Company have engaged directly on climate change risks and its use of a proxy cost of carbon, including in Massachusetts.*

391. ExxonMobil is aware of the importance of climate risk to Massachusetts-based investors because it has had substantial and purposeful continuing contacts with Massachusetts institutional investors and other Massachusetts holders of its securities that include discussions of

climate risk and specifically of the proxy cost of carbon used by ExxonMobil when evaluating its assets or potential investments.

392. Having recognized the increase in ESG-focused investing and demands for disclosure of ESG-related information, ExxonMobil has been working with investor advisory groups that include members representing Massachusetts institutional investors on matters related to the Company's impact on climate change, climate change's impact on the Company's business, and the potential for climate change regulation to impact the Company.

393. In 2011, ExxonMobil established its External Citizenship Advisory Panel, which consisted of five to six independent experts tasked with providing feedback to the Company on the development of its citizenship activities, strategy, and communications.

394. The Boston-based Director of ESG Shareowner Engagement at Walden ("Walden ESG Director") was a member of ExxonMobil's External Citizenship Advisory Panel.

395. At least since 2012, ExxonMobil has had extensive contacts with the Walden ESG Director regarding the Company's engagement with ESG investing advisors, the Company's messaging and public statements concerning climate change and the Company's approach to climate change risks posed to its business.

396. At least since 2014, ExxonMobil reached out to the Walden ESG Director to consult with him about the organization of the Company's regular meetings with ESG shareholders, regarding specifically either the list of invitees or the topics to be discussed at such meetings.

397. For example, in 2014, Brian Tinsley, then Manager, Shareholder Relations at ExxonMobil, emailed the Walden ESG Director to consult with him about the invitees and invitation to a December 2, 2014 ESG shareholder meeting, which was focused on the risk of

climate change and which included a discussion of the Company's proxy cost of carbon and "carbon asset risk."

398. In 2015, Robert Luetttgen, a Manager in the Office of the Secretary at ExxonMobil, emailed the Walden ESG Director to ask for his "thoughts on how best to develop a list of topics to discuss" at an ESG shareholder meeting set for February 12, 2016. The agenda for that meeting included a discussion of the "outcomes and impacts" of the Paris Agreement and the "Company perspective on risks that others claim."

399. In 2016, Mr. Tinsley emailed the Walden ESG Director to consult with him about the date, the invitees, and the invitation to an ESG shareholder meeting set for December 2, 2016. Mr. Tinsley also asked the Walden ESG Director to forward agenda suggestions for the meeting.

400. Massachusetts institutional investors have recently engaged with ExxonMobil regarding climate change in a variety of other ways, including in Massachusetts.

401. In 2015, Mr. Tillerson met in-person with a representative of Fidelity Investments during which they discussed, among other issues, climate change. During that meeting, Mr. Tillerson described the 2015 media coverage related to ExxonMobil and its historic climate knowledge as "nonsense."

402. In late 2015, a Wellington managing director and industry analyst attended a breakfast with Mr. Tillerson, during which Mr. Tillerson relayed, in Wellington's words, that Massachusetts Institute of Technology scientists with whom ExxonMobil works have advised the Company that "the jury is still out," on climate change, meaning that the science remains uncertain.

403. Responding to an internal Wellington summary of the breakfast with Mr. Tillerson, Wellington's then-director of investment research observed that "Exxon[Mobil] is in so deep on this that their CEO may be pursuing the best strategy for shareholders by continuing to say that there is just too much uncertainty, but after decades of keeping the argument from reaching a fever pitch, I think the risks of these institutions being impaired by the public and government are rising very quickly. Many of our clients are going to come to the same conclusion in one way or another and virtually all of them are going to be under pressure to do so."

404. In 2016, Brian Conjelko, then Manager, Investor Relations at ExxonMobil, emailed a Wellington representative on behalf of himself and then-ExxonMobil Vice President of Investor Relations and Secretary Jeffrey Woodbury to request a meeting regarding, among other things, the potential for increased Company disclosures regarding climate change. The ensuing discussion included a discussion of ExxonMobil's views on the Paris Agreement's 2 degree C target and the costs of carbon dioxide mitigation.

405. In 2016, an energy analyst at Fidelity Investments met with Mr. Tillerson, and they discussed, among other topics, Mr. Tillerson's view on so-called "Anti-Energy" advocates. Mr. Tillerson expressed his skepticism about the viability of renewable energy and his confidence in ExxonMobil's business model in the context of proposals to increase the use of renewables.

406. In March 2017, Mr. Woodbury, Mr. Luetgen, and other ExxonMobil representatives traveled to Boston to meet with representatives of State Street about a number of issues, including the impact of climate change and climate change-related regulation on the Company's business. ExxonMobil and State Street specifically discussed the Company's proxy

cost of carbon, write-down of certain assets, and investments in carbon capture and sequestration technology. ExxonMobil management requested the meeting.

407. In October 2017, an analyst at Wellington hosted Mr. Woodbury and other ExxonMobil representatives at a meeting in Boston to discuss a number of issues. An investment manager focused on ESG investing at Wellington also attended the meeting and asked questions about climate risk disclosures. After the meeting ended, Mr. Woodbury further discussed with the ESG manager her questions about the type of climate risk disclosures ExxonMobil might implement.

408. In September or October 2017, an energy analyst at Fidelity Investments hosted Mr. Woodbury and other ExxonMobil representatives in Boston to discuss ExxonMobil's investment options and its long-term outlook on energy markets. During this meeting, ExxonMobil discussed its views on sustained oil demand in light of renewables and other energy alternatives. ExxonMobil also discussed its research into algae biofuels and carbon capture technology.

409. In October 2017, ExxonMobil CEO Darren Woods, Mr. Woodbury, and other ExxonMobil representatives traveled to Boston to meet with representatives of State Street about a number of issues, including the impact of climate change and climate change regulation on the Company's business. ExxonMobil and State Street specifically discussed the Company's proxy cost of carbon and investments in carbon capture and sequestration technology. ExxonMobil management requested the meeting.

410. In 2018, ExxonMobil embarked on what it described as an "East Coast roadshow . . . regarding [its] Energy Outlook and . . . report on impacts of climate change."

411. As part of this “roadshow,” in February 2018, Mr. Woodbury, Mr. Luetngen, and other ExxonMobil representatives again traveled to Boston to meet with representatives of State Street, including a member of its investment team, about a number of issues, including the impact of climate change and climate-change regulation on the Company’s business. ExxonMobil and State Street specifically discussed ExxonMobil’s strategic projection of energy demand, how ExxonMobil considers and helps its customers manage emissions arising from the use and combustion of fossil fuel products, the Company’s stress testing of assets, and its investments in carbon capture and sequestration technology. ExxonMobil management requested the meeting.

412. Also as part of this “roadshow,” in February 2018, Mr. Woodbury, Mr. Luetngen, and other ExxonMobil representatives met with representatives of Wellington in Boston specifically to discuss the impact of climate change and climate-change regulation on the Company’s business.

413. At ExxonMobil’s 2019 annual shareholder meeting on May 29, 2019, Mr. Woods offered the following assurances regarding the Company’s management of climate change risks (emphasis added):

I think the Board takes responsibility for the oversight of all company risk, including climate-related risk. We take that responsibility very seriously. We have a comprehensive framework to assess our business risk including the change and the risk associated with climate change. And for more than a decade, at least 1 session of the full Board each year is dedicated solely to climate issues. It’s also a frequent topic of conversations in review at other sessions of the Board as circumstances warrant. The Board committees are also empowered to provide additional insight on the risk faced by the company. The Board audit committee assesses our overall risk management approach. The public issues and contributions committee regularly reviews safety, health and environmental performance, including the steps taken to identify and manage climate-related risk. *Given the already established risk*

assessment process and structure, the Board is confident that this matter is appropriately addressed

414. Thus, ExxonMobil made numerous representations to these Massachusetts investors regarding climate risks and the Company's use of a proxy cost of carbon and greenhouse gas emissions in business decisions, and these communications constitute substantial, purposeful, and continuing contacts with Massachusetts institutional investors, including physically within the state itself, with regard to these issues.

E. ExxonMobil Is Deceiving Massachusetts Investors by Failing to Disclose the Systemic Risks of Climate Change to the Global Economy, the World's Financial Markets, the Fossil Fuel Industry, and the Company's Business.

415. ExxonMobil has employed a broad strategy of deceptive communications to Massachusetts investors and others, inherent in its Outlook for Energy and climate risk disclosures, that have helped shape investor expectations of the risks of climate change to the global economy, the world's financial markets, the fossil fuel industry, and ExxonMobil's business. The strategy is a pernicious outgrowth of ExxonMobil's decades-long corporate campaign to establish itself as a preeminent thought leader on energy trends and policies.

416. ExxonMobil's supposed climate risk disclosures together assert that ExxonMobil has accounted for and is responsibly managing climate change risks and that, in any event, they pose no meaningful threat to the Company's business model, its assets, or the value of its securities. This is the case, ExxonMobil's disclosures claim, because fossil fuel demand is fated to grow in the coming decades, clean energy alternatives are not and will not in the near future be competitive with fossil fuels, and the world's governments are unlikely to constrain fossil fuel use to limit global warming to the level those governments have agreed is necessary to avert the most harmful potential consequences of climate change.

417. These communications are deceptive because they deny or ignore the numerous systemic risks that climate change presents to the global economy, the world's financial markets, the fossil fuel industry, and ultimately ExxonMobil's own business, as detailed in Sections IV.C, V.B, and V.C above, despite the Company's longstanding scientific understanding of the potentially "catastrophic" nature of these risks.

418. According to recent research, these systemic risks threaten comparable or even greater shocks to the world's financial markets as the 2008 global financial crisis, during which the U.S. subprime mortgage crisis threatened the solvency of the world's major banks and triggered a global financial panic. As set forth in Section V.B above, central bankers and regulators are increasingly calling for greater recognition and disclosure of such systemic risks, which are already manifesting in the unavailability of insurance for low-lying real estate assets and ratings downgrades of municipal bonds for communities affected by extreme weather events.

419. The systemic risks of climate change threaten, in particular, the long-term holdings of Massachusetts investors in ExxonMobil securities.

420. ExxonMobil has never publicly acknowledged or accounted for the way these systemic risks would affect its business, the fossil fuel industry, the world's financial markets, or the global economy, on which ExxonMobil's projections of ever-increasing fossil fuel demand rest.

421. Full and accurate disclosure of these risks by ExxonMobil would influence investment decisions by the Company's Massachusetts investors with respect to ExxonMobil securities.

1. ExxonMobil has long understood the extent of likely and potential climate change impacts but has never disclosed to its investors the systemic risks of these impacts.

422. Decades ago, ExxonMobil already was developing an understanding of many of these potentially systemic climate-related risks to society, the world economy, the financial system, the fossil fuel industry, and the Company's business and assets.

423. As recounted in Section IV.B above, as of at least 1980, Exxon participated in the "AQ-9 Task Force," a meeting at which climate change expert Dr. J.A. Laurman explained that global average temperatures were expected to rise 2.5 degrees C (4.5 degrees F) by 2038, a change that would have "major economic consequences," "bring[ing] world economic growth to a halt," and that, by 2067, temperatures would increase by 5 degrees C (9 degrees F), if emissions continued unabated, a change that would have "globally catastrophic effects."

424. Likewise, as recounted in Section IV.B above, in the early 1980s, Exxon recognized that the net consequences of carbon dioxide-induced changes in climate would be "adverse to the stability of human and natural communities," and an Exxon scientist advised that it was "distinctly possible" that, over the long term, climate change will "produce effects which will indeed be catastrophic (at least for a substantial fraction of the earth's population)." In that same timeframe, Exxon's management was advised of the anticipated and potential impacts associated with the projected temperature increases expected to result from increasing atmospheric carbon dioxide concentrations, including droughts, or as Exxon's scientists put it, "disturbances in the existing global water distribution balance [that] would have dramatic impact on soil moisture, and in turn, on agriculture"; desertification; accelerated growth of pests and weeds; detrimental human health effects; and human population migration.

425. As discussed above, the heating of the global climate is on precisely the track that Exxon scientists forecasted decades ago, and, consistent with those predictions, the adverse impacts and costs of climate change are rapidly increasing.

426. Despite its early scientific understanding of the massive scope of potential climate-related risks to society and the global economy—and the role of its products and business in creating them, ExxonMobil has never accurately disclosed to its investors, even in recent years, the systemic risks from climate change, including the risks they present to the society, the global economy, the world’s financial markets, the fossil fuel industry, or ultimately Company’s business and assets. In failing to disclose this information, ExxonMobil has also failed to disclose to investors the nature of its contingency planning, if any, to respond to these risks.

2. *ExxonMobil’s climate risk disclosures deceptively deny, ignore, and downplay the systemic risks of climate change, including to its business model.*

427. ExxonMobil’s disclosures to investors regarding climate change tell a misleading story—at complete odds with its historic knowledge regarding the systemic risks of climate change—of very little, if any, risk to ExxonMobil’s fossil fuel business. The story is, at bottom, a continuation of its other public-facing campaigns to deny climate change that began in the late 1980s. ExxonMobil’s self-serving account of growing demand for its fossil fuel products, the inadequacy and implausibility of cleaner alternatives, and little risk of asset-stranding or other wealth destruction is deceptive.

428. For the market as a whole, ExxonMobil’s climate risk disclosures have obscured and had the effect of worsening the systemic risks identified by regulators to the world’s financial system, which threaten the ExxonMobil holdings of Massachusetts investors.

429. With escalating investor and regulator concerns about climate change, there is growing recognition that certain companies, and in particular ExxonMobil, have not fully or adequately accounted for climate change risks in public disclosures.

430. ExxonMobil's affirmative disclosures, which incorporate its energy forecasts, not only fail to disclose these risks; in many cases, the disclosures deceptively deny and downplay these risks.

431. Under the guise of thought leadership and economic expertise, ExxonMobil's energy projections comprise a comprehensive, forward-looking set of expectations about future economic conditions and energy resources. It is among the only energy companies in the world that compile and produce such detailed projections. By design, ExxonMobil's projections are closely watched and credited by investors, analysts, and other market participants.

432. With these projections as their foundation, ExxonMobil's climate risk disclosures fail to disclose any meaningful risk from climate change to society, the global economy, the oil and gas sector, or the Company's business and assets, and they downplay the significance of all the climate-related risks that the Company does acknowledge.

433. ExxonMobil's energy and climate risk disclosures deceptively seek to reassure the Company's investors, including its Massachusetts investors, that climate change does not pose the very risks to their ExxonMobil investments that the Company understood as early as the 1970s.

434. On the first page of ExxonMobil's 2014 publication *Managing the Risks*, which it issued to address investor concerns regarding the Company's climate risk management, the Company states that "we are confident that none of our hydrocarbon reserves are now or will

become ‘stranded’” and that “producing these assets is essential to meeting growing energy demand worldwide. . . .”

435. *Managing the Risks* expressly rejects the potential for renewable energy to displace fossil fuels through 2040, stating that “renewable sources, such as solar and wind, despite very rapid growth rates, cannot scale up quickly enough to meet global demand growth while at the same time displacing more traditional sources of energy.”

436. Consistent with this conclusion about renewable energy, *Managing the Risks* describes the Company’s conclusions that risks to its business from policy responses to climate change are “highly unlikely” because:

the scenario where governments restrict hydrocarbon production in a way to reduce GHG emissions 80 percent during the Outlook period [through 2040] is highly unlikely. The Outlook demonstrates that the world will require all the carbon-based energy that ExxonMobil plans to produce during the Outlook period. Also . . . we do not anticipate society being able to supplant traditional carbon-based forms of energy with other energy forms, such as renewables, to the extent needed to meet this carbon budget during the Outlook period

[W]e do not believe a scenario consistent with reducing GHG emissions by 80 percent by 2050, as suggested by the “low carbon scenario,” lies within the “reasonably likely to occur” range of planning assumptions, since we consider the scenario highly unlikely

[T]he company does not believe current investments in new reserves are exposed to the risk of stranded assets, given the rising global need for energy

437. In 2014, ExxonMobil also issued the publication *Energy and Climate*, which contains similar representations to investors about the Outlook for Energy, the limits of renewable energy, and its position that climate-related risks will not constrain its planned development of fossil fuels.

438. *Energy and Climate* describes how, because “ExxonMobil’s business is energy,” ExxonMobil “actively engage[s] society on requirements for the exploration, development, production and distribution of energy to meet the demands of a growing global population.” In the Company’s words, this engagement is “broad and multi-faceted,” including: (i) participating in “efforts to improve the efficiency, effectiveness and environmental footprint of the energy business, its processes and products” through “a multitude of professional organizations”; (ii) “proactively engaging regulators on regimes and approaches that can improve the safety, reliability and sustainability of operations”; (iii) engaging “the public and thought-leaders on energy issues,” including the Outlook for Energy, which is “but one of the many ways that ExxonMobil engages society on energy requirements”; (iv) on climate change, engaging “both with policy makers and the public” through remarks by “our senior executives” including Mr. Tillerson and taking “numerous opportunities to articulate [the Company’s climate] policy positions in our annual Energy Outlook, Corporate Citizenship Report, and Carbon Disclosure Project submission, and through executive speeches, advertising, publications, media interviews and other policy fora”; (v) conducting “scientific, economic and technological research on climate change for nearly 30 years” to “improve scientific understanding, assess policy options and achieve technological breakthroughs that reduce GHG emissions,” including “more than 45 papers in peer-reviewed literature” and the participation of ExxonMobil scientists as “authors and review editors in assessments of the IPCC since its inception”; and (vi) “[s]upporting major [climate-related] projects at a wide range of institutions,” including universities, consultancies, and research centers.

439. These efforts together constitute a sophisticated, global, multi-decade effort to influence financial markets, among others, to credit ExxonMobil’s representations about climate

change and its risks and to accept ExxonMobil's supposed expert conclusions about energy trends and, specifically, ExxonMobil's self-serving global energy demand projections.

440. Consistent with the representations in *Managing the Risks* and *Energy and Climate*, ExxonMobil's later disclosures continue to assert that the Company will face virtually no meaningful transition risks from climate change because aggressive regulatory action is unlikely, renewable energy sources are uncompetitive, and fossil fuel demand and investment will continue to grow.

441. ExxonMobil's 2018 Outlook for Energy projects that, through 2040, "oil grows and continues to be the primary source of energy for transportation and as a feedstock for chemicals" and "[n]atural gas also grows, with increasing use in power generation, as utilities look to switch to lower-emissions fuels." Specifically, "[n]atural gas grows the most of any energy type, reaching a quarter of all demand," and "[o]il will continue to play a leading role in the world's energy mix, with growing demand driven by commercial transportation needs and feedstock requirements for the chemicals industry."

442. In addition, ExxonMobil projects, through 2040, growth in global liquids production of 20 percent "to meet demand growth," including "growth in natural gas liquids, tight oil, deepwater, oil sands and biofuels." As for natural gas, ExxonMobil projects global natural gas demand to grow "by about 40 percent, as its share of the world's energy mix rises from 23 percent to 26 percent between 2016 and 2040."

443. ExxonMobil's 2019 Outlook for Energy, issued in August 2019, repeats these projections in all relevant respects.

444. In these projections, ExxonMobil ignores the systemic risks to the fossil fuel industry presented by sudden or dramatic changes to the industry's economic health. An

illustrative example is the reversal of fortunes of thermal coal mining and coal-fired electric generation in the United States, where coal consumption was 44 percent lower in 2018 than its 2007 peak. Over roughly the last year, major global banking and insurance entities including the European Bank for Reconstruction and Development, Chubb, Zurich Insurance Group, Hannover Re, Allianz Group, Munich Re, Swiss Re, and the insurance unit of BNP Paribas all have announced that they are limiting investment or underwriting in those businesses, rendering many coal companies uninsurable and unbankable by many of the world's major financial institutions.

445. Similar changes in the future could affect investment plans in other parts of the fossil fuel industry, including the oil and gas sector. In this regard, major global financial company Zurich Insurance Group announced in July 2019 that it was updating its policy against investment in or underwriting coal mining and coal-oriented electric generation to exclude companies with major investments in oil sands extraction and oil shale.

446. In its projections, ExxonMobil also wholly ignores the implications for world energy demand of systemic climate change risks and their potentially calamitous economic costs. For example, these projections assume substantial economic growth in developing world countries like India, which are already experiencing devastating climate change impacts, while utterly failing to account for the potential that future impacts will make such growth impossible and will decimate the economic output of such countries, as set forth in Section V.B.

447. In the 2018 Outlook for Energy, ExxonMobil projects that global CO₂ emissions will rise through 2040, to about 10 percent higher than 2016 levels. ExxonMobil's 2019 Outlook for Energy also projects that such emissions will rise over that same time period.

448. ExxonMobil's 2018 Outlook for Energy includes a sensitivity case to test the impact of a market transition to light-duty electric vehicles by 2040. In resigning this transition

to a sensitivity case, ExxonMobil indicates that this case is unlikely. In this case, “total liquids demand in 2040 could be similar to levels seen in 2013 as growth in chemicals and commercial transportation would mostly offset a decline in light-duty vehicle demand.” ExxonMobil’s 2019 Outlook for Energy reiterates the conclusions of this electric vehicle sensitivity case. Thus, through its Outlook for Energy, ExxonMobil misleadingly asserts to investors that rapid growth of cleaner alternatives to internal-combustion vehicle transportation—a major market for its fossil fuel products—would pose little risk to its overall business.

449. ExxonMobil’s 2018 Outlook for Energy also provides an assessment of certain modeled scenarios that would limit global temperature increases to 2 degrees C, in response to demands from investors, including Massachusetts investors, seeking greater disclosure of ExxonMobil’s climate-related risks. ExxonMobil’s 2019 Outlook for Energy includes a similar assessment.

450. First issued together with the Outlook for Energy in 2018 and re-issued in 2019, ExxonMobil’s Energy and Carbon Summary summarizes the assessment as it relates to energy supply and demand and emissions. ExxonMobil’s 2019 Outlook for Energy also references its Energy and Carbon Summary.

451. As described in ExxonMobil’s 2019 Energy and Carbon Summary, “[r]elative to our Outlook, a theoretical 2°C pathway would generally lower demand for oil, natural gas and coal, and increase use of nuclear and renewables.” However, that Summary says, “[e]ven under a 2°C pathway, significant investments will be required in oil and natural gas capacity. In this scenario, according to the [International Energy Agency], cumulative oil and natural gas investments could exceed \$13 trillion by 2040.” The Summary goes on to state that “[p]roduction from our proved reserves and investment in our resources continue to be needed to

meet global requirements and offset natural field decline,” and that “[o]ur businesses are well-positioned for the continuing evolution of the energy system.”

452. The Summary thus indicates to investors that, even in a 2 degree C scenario, its massive investments in fossil fuels are needed and not at risk.

453. The Summary specifically addresses the climate-related risks to the Company’s proved reserves and states that “[b]ased on currently anticipated production schedules, we estimate that by 2040 a substantial majority of our year-end 2017 proved reserves will have been produced. Since the 2°C scenarios average implies significant use of oil and natural gas through the middle of the century, *we believe these reserves face little risk from declining demand*” (emphasis added).

454. In the Summary, ExxonMobil quantitatively discloses exactly one set of resources that it expects would not be economically attractive in a 2 degree C pathway: “a portion of our non-proved resources” that are non-natural gas “unconventional liquids assets in the United States,” comprising “less than 5 percent of ExxonMobil’s total net book value of property, plant and equipment as of September 30, 2018.”

455. With respect to physical climate-related risks to its infrastructure around the world, the Summary states that ExxonMobil conducts “environmental assessments . . . in advance to ensure that protective measures and procedures are in place prior to building and start-up of [Company] facilities,” which are “designed, constructed and operated to withstand a variety of extreme weather and environmental conditions” using “historical experience with additional safety factors to cover a range of uncertainties.” According to the Summary, “ExxonMobil’s comprehensive approach and established systems enable us to manage a wide variety of possible outcomes, including risks associated with climate change.”

456. The Summary concludes with the statement that “[e]xisting policy frameworks (including the Paris [Nationally Determined Contributions]), financial flows, and the availability of cost-effective technologies indicate that society *is not currently on a 2°C pathway*. Should society choose to more aggressively pursue a 2°C pathway, we will be positioned to contribute through our engagement on policy, development of needed technologies, improved operations, and customer solutions” (emphasis added).

457. ExxonMobil CEO Darren Woods told investors at the Company’s 2019 annual shareholder meeting on May 29, 2019, much the same:

Our outlook projects a 25% increase in energy demand. Oil demand is expected to grow by 0.7% a year, driven by commercial transport and chemical feedstocks. Natural gas demand will grow by 1.3% a year to meet electricity and industrial demand. Now some of you may think that growth does not sound like much, but when you factor in depletion rates, new oil production needs to increase by 8% a year and natural gas by 6%. Even under hypothetical scenarios where technology breakthroughs and government policies put the world on a 2-degree path, large investments in new oil and gas supplies are still required due to the significant depletion rates. In fact, the International Energy Agency estimates our industry needs to invest \$21 trillion over the next 2 decades on new energy projects to offset depletion and continue to meet the energy needs of the world’s growing population and increasing middle-class.

458. Mr. Woods repeated those same themes at the Barclay’s 2019 Energy Conference in New York on September 4, 2019, highlighting increasing demand for fossil fuel energy around the world and the Company’s view that clean energy technologies will require major advances over many decades to contribute a significant share of the world’s energy mix.

459. In 2018 and 2019, ExxonMobil did not file any report with CDP and has never provided investors, through CDP or otherwise, any overall or comprehensive quantitative estimates of the potential financial impacts from climate-related risks on ExxonMobil’s business.

460. In its own climate-related disclosures, ExxonMobil has not fully implemented the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures, discussed in Paragraph 370 above, despite claiming that its 2019 Energy and Carbon Summary was “aligned with the core elements of the framework developed by” the Task Force.

461. On June 17, 2019, CDP organized investors with \$11 trillion under management, including Walden, to target ExxonMobil and other companies that have failed to report to CDP.

462. In contrast with ExxonMobil’s internal understanding of climate change risks dating to the 1970s and the numerous recent warnings of the world’s central bankers and financial regulators about the systemic risks of climate change, ExxonMobil’s climate risk disclosures falsely do not disclose any systemic risks from climate change.

3. *ExxonMobil’s misleading omissions and misrepresentations about the systemic risks of climate change are material to its Massachusetts investors.*

463. ExxonMobil’s deceptive omissions and misrepresentations in its climate risk disclosures are material to its Massachusetts investors in violation of Chapter 93A.

464. By failing to appropriately disclose the systemic risks of climate change, and otherwise denying or downplaying those risks, ExxonMobil has deprived its Massachusetts investors of material information regarding a major category of financial risks to their ExxonMobil securities.

465. Such information about the systemic risks of climate change, which ExxonMobil has long known, would have influenced ExxonMobil’s Massachusetts investors to make different investment decisions, including the purchase, sale, retention, and pricing of ExxonMobil securities, in several respects.

466. First, ExxonMobil's failure to disclose the systemic risks of climate change and its statements denying or downplaying such risks in its own climate risk disclosures have undermined investor and market recognition of how these risks may affect and diminish the value of ExxonMobil's business and securities. ExxonMobil's systemic risk omissions and misrepresentations have therefore discouraged and deferred the allocation of investment dollars away from investments in ExxonMobil securities toward other investments that are not exposed to such risks.

467. Second, ExxonMobil's failure to disclose the systemic risks of climate change reduces the accuracy and reliability of the market pricing of carbon assets across the fossil fuel industry, putting Massachusetts investors with ExxonMobil holdings at risk of losses, and increasing the potential for sudden, chaotic, and costly repricing in the future.

468. Third, ExxonMobil's failure to disclose the systemic risks of climate change has delayed investor recognition of such risks and increased the exposure of the markets to such risks. As discussed above in Section V.B, these risks threaten ecological, societal, and economic stability around the world, and ExxonMobil's omissions and misrepresentations will make the likely reallocation of capital required to address climate change risks less orderly and more costly, if not devastating, to ExxonMobil's Massachusetts investors.

469. Conversely, ExxonMobil's disclosure of systemic risks from climate change would benefit the market as a whole by improving investor awareness of these risks in a manner that would promote market stability by permitting orderly shifts in capital allocation and limiting sudden and costly asset repricing and market disruptions, with concomitant benefits to ExxonMobil's Massachusetts investors.

470. Faced with full and accurate disclosures of these risks and ExxonMobil's contribution to those risks, Massachusetts investors in ExxonMobil securities would have pursued different investment or asset diversification strategies to limit their exposures.

471. Appropriate disclosure of the extent to which ExxonMobil's fossil fuel businesses have contributed and are contributing to the potential for systemic risks also would steer many of the Company's Massachusetts investors, including those who have placed a priority on ESG factors, away from investments in ExxonMobil securities and/or the oil and gas sector as a whole. In this regard, such disclosure would accelerate the trend of investor divestment of ExxonMobil securities in particular, as described in Paragraphs 372 through 377 above.

F. ExxonMobil Is Deceiving Massachusetts Investors by Misrepresenting Its Use of a Proxy Cost of Carbon to Account for the Risks of Climate Change Regulation to Its Business and Assets.

472. ExxonMobil has repeatedly represented to investors, including Massachusetts investors directly and indirectly, that ExxonMobil used escalating proxy costs across the Company, consistent with those disclosed in its Outlooks for Energy. ExxonMobil also represented that it applied these escalating proxy costs in planning its major businesses and projects, developing its reserves and resources assessments, conducting asset impairment evaluations, and making energy demand projections.

473. Contrary to its statements, in many instances, ExxonMobil was not actually using proxy costs in this manner. The statements were materially false and misleading because ExxonMobil's actual practices were at odds with what it told investors. In fact, ExxonMobil has: (i) applied a lower, undisclosed proxy cost based on internal guidance; (ii) applied even lower costs based on existing regulations and did not increase those costs for the coming decades, in lieu of applying an escalating proxy cost; or (iii) applied no proxy cost at all. ExxonMobil's

actual practices came to light only very recently, through disclosure of internal ExxonMobil documents in other litigation.

1. ExxonMobil repeatedly represented to Massachusetts investors and others that it applied a proxy cost of carbon, increasing over time and reaching \$80 per ton in OECD countries by 2040.

474. ExxonMobil publishes an annual Outlook for Energy, an analysis of long-term future global energy supply and demand.

475. ExxonMobil represents to the public and investors that it prepares the annual Outlook for Energy to guide its own business strategies, planning, and project investment decisions, which include investments in fossil fuel projects with time horizons lasting fifty years.

476. ExxonMobil's Outlook for Energy is prepared by its Corporate Strategic Planning Department and discussed extensively with ExxonMobil's Management Committee and Board prior to release.

477. For more than a decade, ExxonMobil has represented to investors and the public in the annual Outlook for Energy that, by applying a "hypothetical cost of CO₂," that captures the cost of regulations and policies to reduce greenhouse gas emissions from fossil fuel combustion, ExxonMobil accounts for "the competitiveness of various fuels." In other words, applying a proxy cost of carbon allows ExxonMobil to predict, over time, the point at which certain carbon-intensive fuels, like coal, oil sands, and conventional oil could reach prices that would trigger a reduction in demand and a switch to less carbon-intensive, lower-priced fuels, like natural gas, or zero-carbon fuels like wind and solar power.

478. Over the years, ExxonMobil has made numerous statements to Massachusetts investors and others about its use of a proxy cost of carbon, and many of those investors have assigned significant importance to those statements, as discussed below.

479. ExxonMobil projected in its 2007 Outlook for Energy that “[a]t \$30 per ton of CO₂, coal plants move to about 7 cents per [kilowatt-hour] and become significantly disadvantaged.”

480. ExxonMobil made similar representations in its 2009 and 2010 Outlooks for Energy.

481. ExxonMobil’s 2010 Outlook predicted that “by 2020, adoption of [emission reduction] policies will be equivalent to adding CO₂ costs of about \$30 per ton in the OECD. At this level, natural gas becomes a lower-cost source of electricity than coal, while nuclear and wind become increasingly competitive. This shift becomes even more pronounced if CO₂ costs rise to \$60 per ton, which is where we anticipate policies in the OECD will drive costs by 2030.” OECD means the Organisation for Economic Co-operation and Development, which includes thirty-six countries with developed economies including the United States, Canada, Mexico, European nations, Japan, South Korea, Chile, among others.

482. In its 2012 Outlook for Energy, ExxonMobil reported it “expects that by 2040, OECD countries will – directly or indirectly – have a cost of CO₂ of \$80 a ton.”

483. In its annual Outlooks for Energy, ExxonMobil repeatedly represented to Massachusetts investors and others that ExxonMobil accounted for the potential impact on its own business of regulatory and other efforts to address climate change by applying a proxy cost of carbon.

484. In its 2013 Outlook for Energy, ExxonMobil represented that “ExxonMobil assumes a cost of carbon as a proxy for a wide variety of potential policies that might be adopted by governments over time to help stem GHG emissions such as carbon emissions standards, renewable portfolio standards and others.” In many OECD countries, the 2013 Outlook projected

the proxy cost of carbon to reach \$60 per ton by 2030, and stated that, “in most OECD nations, ExxonMobil expects the implied cost of CO₂ emissions to reach about \$80 per ton in 2040.”

485. Industry press, financial analysts, and investment banks closely track ExxonMobil’s annual Outlook for Energy projections. For example, Wellington circulated at least the 2012 and 2017 Outlooks internally.

486. In a December 2013 presentation to the Center for Strategic and International Studies on ExxonMobil’s 2014 Outlook, ExxonMobil Vice President for Corporate and Strategic Planning, Bill Colton, represented that ExxonMobil “add[s] a notional \$60 per ton as a cost of carbon for this [2014 Outlook] analysis What this means is, the proxy for the costs of carbon, based on our expectation that governments around the world will continue to establish policies which effectively put a price on carbon.”

487. According to Mr. Colton, ExxonMobil undertakes the analysis set forth in its annual “Outlooks,” in order to “guide our business strategies and plans, because we are making billion-dollar investment decisions, and the horizon for these projects, a typical project of ours will last easily fifty years. So we have to keep a strong focus on what is happening in the future.”

488. Further discussing how ExxonMobil factors in its proxy cost of carbon for business planning, Mr. Colton observed that “people don’t think so much about cost of carbon, but think of today in the U.S. the [Environmental Protection Agency] has set standards for new coal-fired power stations that basically require carbon capture and sequestration. We know, because we’re quite familiar with those economics, that it costs about \$80 per ton to do that. So with that policy they have imposed an \$80 per ton cost of carbon for that sector. So that is just one example of how we use this as an imputed cost of carbon, based on things governments are actually doing.”

489. ExxonMobil's Vice President of Public and Government Affairs, Ken Cohen, speaking at the same December 2013 event stated, "certainly, we are anticipating the cumulative impact of various regulations are [sic] going to raise the cost of our operations and the cost of the use of various forms of fuel."

490. At a December 2013 meeting between ExxonMobil and Walden, Peter Trelenberg, ExxonMobil's Environmental Policy and Planning Manager, represented to Walden that ExxonMobil was applying a proxy cost of carbon of \$80 per ton by 2040 in OECD countries.

491. A December 6, 2013 story published by Bloomberg reported that ExxonMobil, "the biggest energy company by market value, is basing plans for future capital investment on the assumption that it will have to pay \$60 a metric ton for carbon emissions."

492. The Bloomberg story reported that ExxonMobil's spokesperson, Alan Jeffers, confirmed that "Exxon[Mobil] has been factoring future carbon costs into project planning since 2007."

493. In its 2014 Outlook for Energy, ExxonMobil represented that "[t]o help model the potential impacts of a broad mosaic of future [greenhouse gas emissions] policies, we use a simple cost of carbon as a proxy mechanism. For example, in most OECD nations, we assume an implied cost of CO₂ emissions that will reach about \$80 per tonne in 2040. OECD nations are likely to continue to lead the way in adopting these policies, with developing nations gradually following, led by China."

494. In March 2014, ExxonMobil represented to Arjuna that it applied a proxy cost of carbon "in assessing investment opportunities."

495. In late 2014, ExxonMobil met with Walden and represented that the proxy cost of carbon was one of the most significant factors in the Outlook model, and that it would reach \$80 per ton in 2040 in OECD countries, and \$40 per ton in Brazil and China in that same timeframe.

496. Thus, during the period beginning in 2007 to the present, ExxonMobil's Outlook for Energy has consistently presented ExxonMobil's modeled expectation that, as a result of anticipated governmental policies to curb climate change, the costs associated with reducing greenhouse gas emissions would increase over time.

497. ExxonMobil made similar representations in other ExxonMobil publications regarding its use of a proxy cost of carbon, including the two March 2014 reports, *Energy and Climate* and *Managing the Risks*, discussed above.

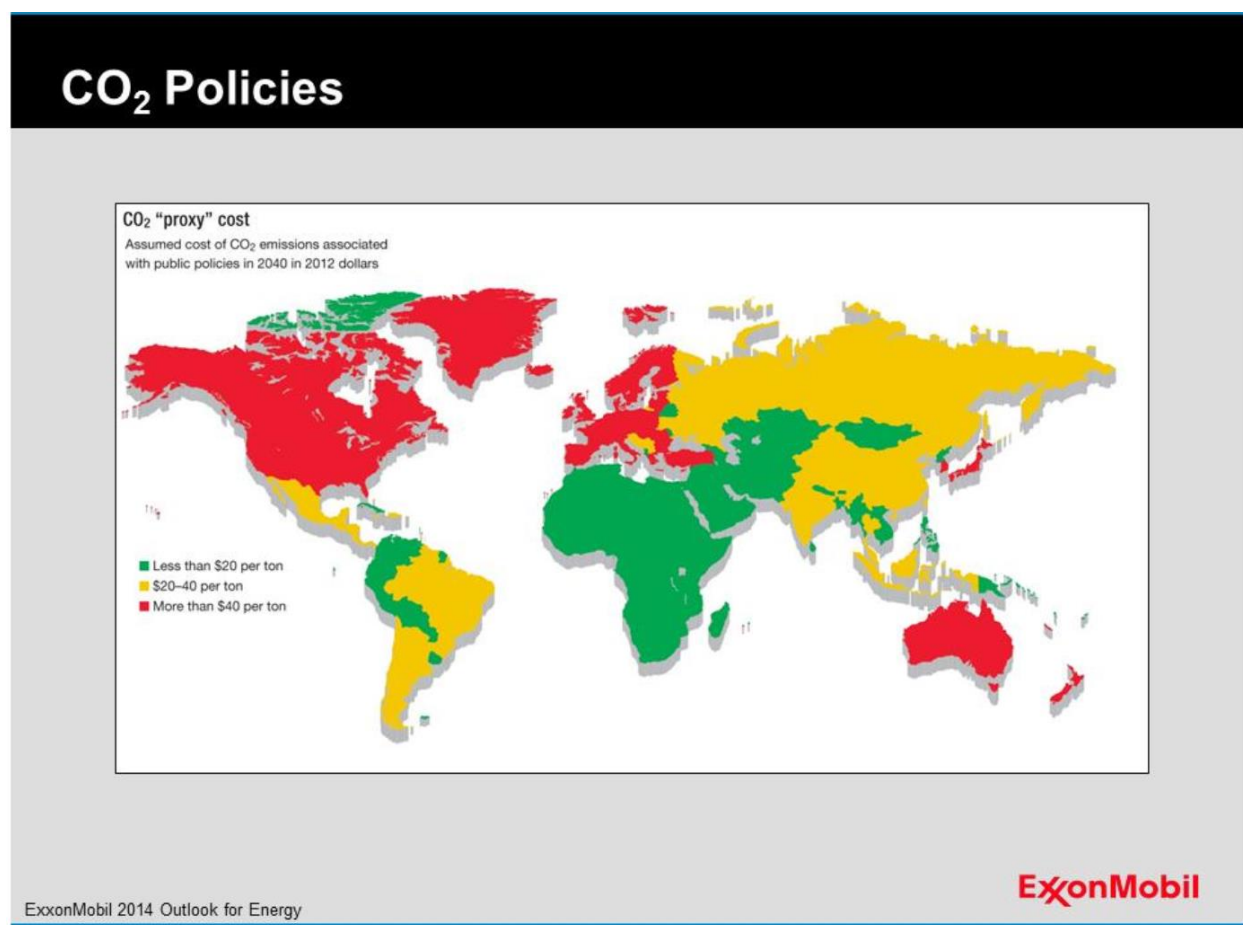
498. ExxonMobil specifically prepared *Energy and Climate* and *Managing the Risks* to address the concerns of investors, including Massachusetts investors, regarding the climate-related risks to ExxonMobil's business and assets and its strategic planning to address those risks.

499. ExxonMobil made a number of representations in *Energy and Climate* about the manner in which it uses the proxy cost of carbon in its business planning. For example, in a section titled "The Outlook for Energy: A View to 2040," ExxonMobil set forth the manner in which it uses a proxy cost of carbon when preparing its Outlook for Energy reports:

[F]or our Outlook, we use a cost of carbon as a proxy to model a wide variety of potential policies that might be adopted by governments to help stem GHG emissions. For example, in the OECD nations, we apply a proxy cost that is about \$80 per ton in 2040. In the developing world, we apply a range of proxy costs with the more wealthy countries, like China and Mexico, reaching about \$30/ton in 2040. . . . This GHG proxy cost is integral to ExxonMobil's planning, and we believe the policies it reflects will increase the pace of efficiency gains and the adoption by society of lower-carbon technologies through the Outlook period

ExxonMobil's proxy cost seeks to reflect a reasonable approximation of costs associated with policies that society may impose over time on GHG emissions, policies that we believe would drive society towards increased efficiency and changes to the energy system and its fuel mix.

500. A map presented in that section of *Energy and Climate* visually depicts the proxy cost of carbon in 2040 as applied by ExxonMobil for three color-coded categories of countries: (i) red-colored, mostly OECD countries, "[m]ore than \$40 per ton," (ii) yellow-colored, mostly non-OECD countries, including China, Indonesia, and Russia, "\$20-40 per ton," and (iii) green-colored, remaining non-OECD countries, "[l]ess than \$20 per ton." The map is reproduced below.



501. In a section of *Energy and Climate* titled, “[e]valuating climate risk in our planning,” ExxonMobil also expressly represented that to “reduce risk” and “enhance profitability,” it “employs a robust process for evaluating investment opportunities and managing our portfolio of operating assets. ExxonMobil requires that all business units use a consistent corporate planning basis, including the proxy cost of carbon discussed above, in evaluating capital expenditures and developing business plans.”

502. ExxonMobil expressly prepared *Managing the Risks* for the purpose of “address[ing] important questions raised recently by several stakeholder organizations on the topics of global energy demand and supply, climate change policy, and carbon asset risk.” Consistent with its representations in the *Energy and Climate* report, ExxonMobil represented in *Managing the Risks* that it had long applied a proxy cost of carbon in its Outlooks, and takes those costs into account when making capital investment decisions:

We also address the potential for future climate related controls, including the potential for restriction on emissions, through the use of a proxy cost of carbon. This proxy cost of carbon is embedded in our current Outlook for Energy, and has been a feature of the report for several years. The proxy cost seeks to reflect all types of actions and policies that governments may take over the Outlook period relating to the exploration, development, production, transportation or use of carbon-based fuels. Our proxy cost, which in some areas may approach \$80/ton over the Outlook period, . . . is simply our effort to quantify what we believe government policies over the Outlook period could cost to our investment opportunities. Perhaps most importantly, we require that all our business segments include, where appropriate, GHG costs in their economics when seeking funding for capital investments. We require that investment proposals reflect the climate-related policy decisions we anticipate governments making during the Outlook period and therefore incorporate them as a factor in our specific investment decisions.

503. ExxonMobil assured investors in *Managing the Risks* that the Company properly accounted for climate risks in all of its business planning and investment decisions, including

decisions regarding costs associated with proposed significant new projects, by its application of a proxy cost of carbon:

We rigorously consider the risk of climate change in our planning bases and investments. . . . We also require that all significant proposed projects include a cost of carbon—which reflects our best assessment of costs associated with potential GHG regulations over the Outlook period—when being evaluated for investment.

504. ExxonMobil represented in *Managing the Risks* that, based on its annual Outlook for Energy analysis, which “explicitly account[s] for the prospect of policies regulating greenhouse gases” by applying a proxy cost of carbon, “we are confident that none of our hydrocarbon reserves are now or will become stranded.”

505. *Managing the Risks* includes the same colored coded map that appeared in *Energy and Climate* representing which range of proxy carbon cost ExxonMobil applies in different countries.

506. Together with ExxonMobil’s Form 10-Ks, ExxonMobil’s representations in *Energy and Climate* and *Managing the Risks* also indicated that the Company was applying a proxy cost of carbon in asset impairment evaluations, as, for example, the Company stated in its 2015 Form 10-K that cash flows used in ExxonMobil’s impairment testing “make use of [ExxonMobil’s] price, margin, volume, and cost assumptions developed in the annual planning and budgeting process, and are consistent with the criteria management uses to evaluate investment opportunities,” consistent with Generally Accepted Accounting Principles (“GAAP”).

507. Investors paid close attention to ExxonMobil’s representations regarding its use of a proxy cost of carbon to mitigate risk posed by regulations and policies to reduce greenhouse gases that could affect fuel price and demand for ExxonMobil’s carbon-intensive products.

508. A Credit Suisse daily newsletter dated March 24, 2014, reported that “Some companies use a so-called shadow carbon price to anticipate the future cost from climate policy when planning new projects. Of 30 U.S. companies that use a shadow carbon price, Exxon[Mobil]’s is among the most aggressive. Exxon[Mobil]’s shadow price of \$60 per ton of CO₂ pollution is more than seven times the current cost of carbon permits in the [European Union] cap-and-trade system and is 62 percent higher than the White House’s estimate of the social cost of carbon pollution. While investors might fault Exxon[Mobil] for not doing enough to prepare for the future, it’s hard to argue that it’s not taking the climate threat seriously, at least on paper.”

509. In a 2015 internal Bank of America/Merrill Lynch presentation, the bank cited ExxonMobil’s 2015 Outlook for Energy, *Managing the Risks*, and *Energy and Climate*, and noted that ExxonMobil applies a proxy cost of carbon in planning, which “approaches \$80/ton over the [O]utlook period,” and “[a]ll business unit[s] plan around the proxy cost of carbon.”

510. In a 2015 report prepared by WSP Parsons Brinckerhoff for Bank of America, the firm advised the bank that, to address current and potential climate change policy, ExxonMobil uses a proxy cost of carbon in its Outlook for Energy. Citing ExxonMobil’s 2014 response to the Carbon Disclosure Project, WSP Parsons Brinckerhoff relayed that ExxonMobil’s proxy cost of carbon reflects all government actions and policies that may be taken over the Outlook period relating to the exploration, development, production, transportation, or use of carbon-based fuels, and approaches \$80/ton over the Outlook period. Based on its analysis of ExxonMobil’s representations, WSP Parsons Brinckerhoff advised Bank of America that ExxonMobil “requires that all business segments include GHG costs in their analyses when seeking funding for capital investments, requiring that investment proposals reflect climate-related policy decisions.”

511. The WSP Parsons Brinckerhoff report specifically cited ExxonMobil's representation in *Managing the Risks* that none of its hydrocarbon reserves are now or will become stranded. The report noted ExxonMobil's express representation that its conclusion regarding stranding risk was based on its Outlook for Energy forecast, which incorporates consideration of the prospect of policies that regulate greenhouse gas emissions.

512. Following a 2015 meeting with ExxonMobil, BlackRock, Inc. noted that ExxonMobil includes a proxy cost of carbon in all of its investment decisions.

513. In a December 2015 article published on its website titled, "ExxonMobil and the Carbon Tax," ExxonMobil represented (emphasis added):

We have also made clear our [carbon tax] position each year since 2009 in our Corporate Citizenship Report and in media briefings launching our *Outlook for Energy: A View to 2040*. This year alone we have delivered more than 300 of these *Outlook* presentations to a wide variety of parties engaged in the public discussion about energy, the environment, and climate. These meetings have taken place all over the world and have included government officials (e.g. European Union, U.S. Department of Energy, members of congress), representatives from religious and faith-based institutions (e.g. Presbyterian Church USA, United Church of Christ, the Vatican), and officials from non-governmental and academic organizations (e.g. World Bank, Bipartisan Policy Center, and numerous universities). . . .

One key point we make in many of these briefings is that ExxonMobil has included a proxy price on carbon in our business planning since 2007. This enables us to analyze the impact of a price on carbon on various investment opportunities. This proxy cost, which in some regions may approach \$80 per ton, seeks to reflect all types of actions and policies that governments may take.

This December 2015 article remains available to Massachusetts investors on ExxonMobil's website.

514. ExxonMobil's largest shareholder, Vanguard Group, Inc. ("Vanguard"), highlighted *Managing the Risks*' discussion of ExxonMobil's use of a proxy cost of carbon "which in some areas may approach \$80/ton over the Outlook period."

515. In 2016, a Vanguard analyst prepared an assessment of ExxonMobil's key risks, including costs associated with climate change regulation and decline in ExxonMobil's stock value. The Vanguard analyst noted that ExxonMobil has used a proxy cost of carbon since 2007, which may approach \$80/ton over the Outlook period, and that ExxonMobil had represented that none of its hydrocarbon reserves are or will be at risk of stranding. Regarding any risk to the company posed by the cost of climate change regulatory compliance, the analyst assigned a "low" risk to ExxonMobil, since the "Outlook for Energy anticipates policies will add rising costs (est. \$80/ton by 2040)."

516. In an article appearing on its website from on or about 2016 through 2019 titled "Meeting Global Needs—Managing Climate Change Business Risk," ExxonMobil represented that:

We use a simple cost of carbon as a proxy mechanism to help model the potential impacts of a broad mosaic of future GHG policies. For example, in most OECD nations, we assume an implied cost of CO₂ emissions that will reach about \$80 per metric ton in 2040. Developing nations will have a wide range of policy costs with the wealthiest ones reaching about \$35 per metric ton.

517. In its 2015 Form 10-K filed with the SEC in February 2016, ExxonMobil told investors that, for purposes of its Outlook for Energy, ExxonMobil "continue[d] to assume that governments will enact policies that impose rising costs on energy-related CO₂ emissions, which we assume will reach an implied cost in OECD nations of about \$80 per tonne in 2040."

518. In February 29, 2016 correspondence to the SEC, ExxonMobil represented to the SEC that “[t]he Company is comfortable that its proxy cost of up to \$80 in some regions appropriately captures the cost of expected rising carbon restrictions through 2040.”

519. ExxonMobil’s March 2016 Corporate Citizenship Report also represented that ExxonMobil applied a proxy cost of carbon that approached \$80 per ton by 2040 in some regions, and which has been included in ExxonMobil’s Outlook for Energy “for several years.”

520. In the ExxonMobil 2016 Annual Executive Compensation Conference Call held on May 12, 2016, ExxonMobil’s then-Vice President of Investor Relations and Secretary Jeffrey Woodbury represented to shareholders that the Company’s Outlook for Energy has used a proxy cost of carbon since 2007.

521. A few weeks later, on May 25, 2016, ExxonMobil’s then-CEO Tillerson told shareholders at ExxonMobil’s annual meeting that “unlike many of our competitors, we have for many years included a price of carbon in our Outlook. *And that price of carbon gets put into all of our economic models when we make investment decisions as well.* It’s a proxy. We don’t know how else to model what future impacts might be. But whatever policies are, ultimately, they come back to either your revenues or your cost. *So we choose to put it in as a cost.* So we have accommodated that uncertainty in the future, and *everything gets tested against it*” (emphasis added).

522. The next day, on May 26, 2016, during a meeting with Wells Fargo, ExxonMobil represented that it applied a proxy cost of carbon of \$80 per ton by 2040 in OECD countries, and “\$20 [plus/minus] 10 by 2040” in non-OECD countries.

523. In a May 30, 2016 equity research report detailing the highlights of its investor meeting with ExxonMobil, Wells Fargo summarized the representations ExxonMobil had made

regarding its application of a proxy cost of carbon “on all of its future developments.” The report also summarized the following points, with respect to ExxonMobil’s representations regarding its use of a proxy cost of carbon: “This approach reduces the risks associated with future CO₂ emissions and incentivizes [ExxonMobil] to reduce overall emissions of all future projects. Also, all future project economics will not be negatively affected by future GHG rules, regulations and taxes. This approach also helps [ExxonMobil] avoid the risk of stranded investments.”

524. During a July 29, 2016 conference call regarding ExxonMobil’s second-quarter-2016 earnings, Mr. Woodbury told investment analysts that its Outlook for Energy had “for many years” included a proxy cost of carbon, which, over the Outlook period, grows to “as high as \$80 per ton.”

525. ExxonMobil represented to State Street at their March 2017 meeting in Boston, discussed above, that it applies a carbon price typically ranging from about \$5 to \$80 per ton, using higher carbon prices of \$20 to \$80 per ton in developed countries, and lower prices in less developed countries. It did not explain any deviation from the proxy cost disclosed in its Outlook for Energy.

526. In May 2017, ExxonMobil sent to Vanguard slides explaining how ExxonMobil applies its proxy cost of carbon and held a call with Vanguard. During that call, ExxonMobil represented that it faced no risk of stranded assets, and that the proxy cost of carbon ExxonMobil had already built into its Outlook reflected even more aggressive policy than the greenhouse gas emissions reduction targets set forth in the Paris Agreement.

527. At ExxonMobil’s annual shareholder meeting on May 31, 2017, Mr. Woods told shareholders that its Outlook for Energy—“one of our most important planning tools”—uses a

proxy cost of carbon to estimate potential climate risk impacts. Mr. Woods also represented that “the carbon reductions in our Outlook are consistent with the pledges in the Paris Agreement.”

528. ExxonMobil represented to State Street at their October 2017 meeting in Boston, discussed above, that ExxonMobil was addressing climate risk and relayed that the Company did not anticipate any significant climate-driven change in demand for its fossil fuel products, which would include any changes associated with climate regulation that would be anticipated through application of a proxy cost of carbon.

529. At ExxonMobil’s February 2018 meeting with State Street in Boston, ExxonMobil again relayed to State Street that, based on its annual energy demand projection, it did not expect any significant change in demand for its products in the coming years, which would include any changes associated with climate regulation that would be anticipated through application of a proxy cost of carbon.

530. Thus, ExxonMobil repeatedly reassured Massachusetts investors that the Company was managing climate change risks through the comprehensive use of the disclosed proxy costs of carbon set forth in its Outlook for Energy and other Company publications, which escalated over time and reached \$80 per ton in certain countries.

2. *In actual practice, ExxonMobil, with full management knowledge, applied secret, lower—and riskier—internal proxy costs of carbon, contrary to its representations to Massachusetts investors.*

a) **ExxonMobil’s internal guidance provided for proxy costs lower than its publicly represented proxy costs.**

531. For years, ExxonMobil in reality applied significantly lower proxy costs than those represented to investors, including Massachusetts investors. In particular, ExxonMobil used an undisclosed set of proxy costs that was set out in its internal Corporate Plan Dataguide and Appendices (“Corporate Plan”). The Corporate Plan is an internal ExxonMobil document,

issued annually and approved by ExxonMobil's senior management, which provides assumptions for the Company's business units to apply in making economic projections, including as part of the Company's annual planning and budgeting process.

532. The proxy cost figures in ExxonMobil's Corporate Plan were inconsistent with, and significantly lower than, the Company's publicly represented proxy costs until June 2014 for OECD countries, and until June 2016 for non-OECD countries. For these periods, ExxonMobil based investment decisions and business planning on significantly lower proxy costs than those the Company represented to investors that it used.

533. ExxonMobil's GHG Managers internally warned that using these lower figures made ExxonMobil more vulnerable to the risks of climate change regulation. Indeed, one of those managers admitted in an internal presentation that the Company's proxy cost representations were likely to be misleading.

(1) OECD countries

534. As discussed above, in its 2010 Outlook for Energy, ExxonMobil publicly represented that its proxy cost for projects in OECD countries was \$60 per ton of emissions in 2030, while the undisclosed Corporate Plan proxy cost actually utilized by ExxonMobil reached only \$40 per ton in 2030.

535. In 2012, 2013, and 2014, ExxonMobil publicly represented that its proxy cost was \$60 per ton in 2030, and that it would increase to \$80 per ton in 2040. However, until June 2014, ExxonMobil's undisclosed internal Corporate Plan proxy cost still reached only \$40 per ton in 2030 for OECD countries, and did not increase in later years.

536. ExxonMobil's decision to apply lower proxy costs pursuant to its internal Corporate Plan likely affected investment decisions for major projects, including certain of those identified below.

537. ExxonMobil's management, including Mr. Tillerson and other members of the Management Committee, knew of and approved the significant deviation between the publicly disclosed proxy cost and the lower proxy costs set forth in the undisclosed Corporate Plan.

538. In response to a question from the Carbon Disclosure Project asking ExxonMobil to identify "the highest level of direct responsibility for climate change within [the] organization," the Company explained that "the Chairman of the Board and Chief Executive Officer and members of the Management Committee are actively engaged in discussions relating to greenhouse gas emissions and the risks of climate change on an ongoing basis," and "the Chairman of the Board and Chief Executive Officer, the President and the other members of the Management Committee ultimately have responsibility for climate change matters."

539. In particular, Management Committee members reviewed and approved the Outlook for Energy and key elements of the Corporate Plan each year. Further, Mr. Tillerson reviewed and approved the *Energy and Climate* and *Managing the Risks* reports.

540. ExxonMobil's management approved of the deviation between its internal and public proxy cost values even though it knew that the lower internal values were less protective against climate change regulatory risk than the proxy cost described publicly and that doing so contradicted its public statements. Further, ExxonMobil knew that the higher proxy costs described to investors were a more realistic projection of future costs associated with greenhouse gas emissions than the lower costs it actually applied in its cost projections. ExxonMobil's then-GHG Manager wrote in an email to colleagues on April 30, 2010, that he "[r]ecognize[d]" that the "2030 cost of \$40 [per ton]" in the Corporate Plan was a "low" estimate of costs likely to be incurred, and that the Outlook for Energy's "assumption of \$60 [per ton] is likely more realistic."

541. ExxonMobil management discussed reconciling the internal Corporate Plan proxy costs with the publicly disclosed proxy costs years before that step was finally taken.

542. On April 22, 2011, ExxonMobil's then-GHG Manager sent an email to colleagues asking "whether to harmonize" the lower, internal proxy costs with the higher, publicly disclosed proxy costs. He stated that harmonizing the two sets of figures would "provide more clarity and alignment throughout [the] organization" and would be "rational."

543. However, another manager responded that CEO "Rex [Tillerson] has seemed happy with the difference previously."

544. ExxonMobil management did not adopt the proposal to increase the Company's internal proxy costs to conform to its public representations. Accordingly, the deviation between ExxonMobil's internal and external proxy cost figures continued for at least three more years.

545. In June 2014, ExxonMobil revised its Corporate Plan guidance to require the use of a proxy cost of carbon in OECD countries of \$80 per ton by 2040, for the first time in apparent alignment with the proxy cost described in its Outlook for Energy.

546. In an October 2014 email exchange, a development planning manager described this alignment as a "huge change," and another manager stated that he suspected the change was made "to address GHG risks in response to shareholder increasing queries and concern."

547. Despite the significance of this June 2014 proxy cost alignment, ExxonMobil never disclosed it to the Company's investors, nor did the Company disclose that its internal guidance had significantly deviated from the Company's publicly represented proxy costs for years.

548. This deviation had the effect of understating the potential material risks from climate change regulation with respect to all of ExxonMobil's project investments and

evaluations in OECD countries using the Corporate Plan. ExxonMobil thus made investments in projects during this time period that were riskier than investors were led to believe.

(2) *Non-OECD Countries*

549. Before 2016, ExxonMobil's Corporate Plan directed employees not to apply proxy costs to its projected greenhouse gas emissions in base economic models for projects in non-OECD countries. Instead, the Corporate Plan instructed employees to include proxy costs in non-OECD countries only in certain sensitivity analyses. In contrast with base economic models, which reflect the Company's actual forecasts, sensitivity analyses test a range of hypotheticals that are considered less likely to occur, and thus have less influence on the Company's decision-making. Moreover, ExxonMobil's pre-2016 Corporate Plans did not specify any proxy cost figures for use in such sensitivity analyses.

550. ExxonMobil revised its Corporate Plan to include proxy cost figures for non-OECD countries in June 2016. Internal communications described the 2016 revision as a "major change" in procedures at the Company. The revision required expedited efforts throughout the Company to calculate, *for the first time*, projected greenhouse gas emissions and the associated costs for specific assets in non-OECD countries, despite the fact that for years that it had directly and indirectly represented to investors, including Massachusetts investors, that it applied a proxy cost of carbon in non-OECD countries.

551. Only after meeting a "tight deadline on implementation of the new guidelines" for the July 2016 planning and budgeting submissions did employees begin to consider "how to incorporate" the new proxy costs for non-OECD countries "into [ExxonMobil's] modeling on a more permanent basis," including considering what impact the new guidance might have on the Company's investment decisions and reserves calculations.

552. Before mid-2016, ExxonMobil had not even projected future greenhouse gas emissions for certain non-OECD projects—let alone applied proxy costs to such emissions.

553. ExxonMobil deviated from its public representations by not applying proxy costs to its greenhouse gas emissions for major investments in non-OECD countries. For example, despite ExxonMobil’s public representations in 2013 and 2014 in the color-coded map it included in multiple reports that it applied a proxy cost in Guyana and Indonesia of \$20-\$40 per ton in 2040, ExxonMobil did not incorporate any proxy costs into its economic analysis for major projects in those countries until after June 2016.

554. By not using publicly represented proxy costs in non-OECD countries, ExxonMobil understated its projected costs when making investment decisions and conducting business planning in those countries and made investments in projects that were riskier to the Company than the Company led investors to believe.

- b) For major businesses and projects, ExxonMobil applied proxy costs much lower than either its publicly represented proxy costs or the proxy costs in its internal guidance, or no proxy costs at all.**

555. After ExxonMobil increased the proxy costs in its Corporate Plan guidance to conform to its public representations in part in 2014 and again in 2016, the Company’s planners realized that the application of the higher publicly disclosed proxy costs would result in significantly higher “massive GHG costs, “very material” reductions in profitability, “large write-downs,” and shorter asset lives.

556. Rather than accept the consequences of incorporating the risks of climate change regulation as it had represented to investors by applying the publicly represented proxy cost, ExxonMobil management decided to apply an “alternate methodology” in certain cases. This “alternate methodology,” not disclosed to investors, consisted of applying a lower proxy cost

than publicly represented, or no proxy cost at all, to ExxonMobil's projected greenhouse gas emissions in important areas of its business, including Canadian oil sands and North American natural gas assets.

557. For certain Canadian oil sands projects, rather than applying a proxy cost, ExxonMobil assumed, contrary to its representations, that existing climate regulation would remain in place, unchanged, indefinitely into the future.

558. In these cases, including at Imperial Oil's Kearl project, ExxonMobil applied a much lower cost per ton to a small percentage of greenhouse gas emissions based on existing regulation, held flat indefinitely. ExxonMobil applied these flat, lower proxy costs to both investment decisions at Canadian oil sands projects and to reserves assessments, including at Imperial Oil's Kearl project, as discussed in more detail below. This conduct was directly contrary to ExxonMobil's public representations that it applied escalating proxy costs to its businesses.

559. In other cases, such as North American natural gas investments, ExxonMobil used no proxy cost at all based on assumptions that the cost of climate regulation would not be borne by the Company, directly contrary to its public representations about its use of proxy costs across its global portfolio of projects.

560. ExxonMobil's application of lower proxy costs than it publicly represented or no proxy costs at all, even after the Company revised its internal guidance, affects parts of the business with significant greenhouse gas emissions, where applying the publicly represented proxy cost would have had a particularly significant impact on the Company's investment decisions and business planning.

c) ExxonMobil did not apply the publicly represented proxy costs to company reserves and resource base assessments.

(1) Before 2016, ExxonMobil generally did not apply a proxy cost to company reserves and resource base assessments.

561. Before 2016, ExxonMobil generally did not apply proxy costs to its greenhouse gas emissions for purposes of estimating project costs in their company reserve and resource base assessments in many countries throughout the world. Indeed, until mid-2016, ExxonMobil planners did not develop a methodology for applying proxy costs to greenhouse gas emissions for purposes of those estimates.

562. Because ExxonMobil did not incorporate its publicly represented proxy cost into its company reserves and resource base assessments for many countries before mid-2016, its representations relating to proxy costs and to company reserves and resource base assessments were materially false and misleading.

(2) ExxonMobil applied a much lower proxy cost in calculating reserves and resources associated with oil sands projects in Alberta.

563. ExxonMobil did not apply its publicly represented proxy costs in the cost projections associated with its company reserves assessments for its Alberta oil sands assets. Instead, ExxonMobil applied far lower existing legislated costs, held those costs flat into the future, and applied those costs to only a small percentage of emissions pursuant to existing legislation. Accordingly, the Company's public representations were materially false and misleading.

564. On November 10, 2014, an Imperial Oil planner reported to ExxonMobil management that application of the proxy cost in the "GHG Update" to the 2014 Corporate Plan to western Canada oil sands "opportunities," including Aspen and other projects, would result in

reductions of the projects' discounted cash flow rates "in the magnitude of 0.5-1.0%," a level the planner described as "very material."

565. On October 5, 2015, ExxonMobil management instructed an Imperial Oil planner tasked with evaluating company reserves to assume, based on existing legislation, that only 20 percent of greenhouse gas emissions would be taxed, and to "hold flat" that assumption indefinitely into the future. In response, the planner pointed out "[t]he basis provided is different from the pricing/guidance at CP15 [2015 Corporate Plan]; Meaning, on this basis, our GHG costs are misaligned," and that the costs "need to be accurate & aligned . . . for our economics to be accurate." He then asked a colleague: "Just between ourselves . . . Why is it necessary to deviate from CP15 [2015 Corporate Plan] GHG assumptions?"

566. Rather than correcting this deviation, ExxonMobil management decided, as described in an October 8, 2015 internal email, to "go 'full legislated' (legislated price of carbon, legislated intensity)." Thus, for purposes of evaluating company reserves, ExxonMobil assumed that no new costs associated with greenhouse gas emissions would be imposed in Alberta, and (with respect to "intensity") that only 20 percent of greenhouse gas emissions would be taxed, indefinitely into the future.

567. Additionally, a late 2015 internal presentation concerning the Kearl oil sands asset states that, for company reserves assessments, ExxonMobil was applying proxy costs that were reflective of current Alberta legislation, rather than the Corporate Plan. According to an internal Company analysis, this resulted in an application of projected greenhouse gas-related costs at Kearl of approximately \$0.25 USD per barrel rather than \$4 USD per barrel, a difference of nearly 94 percent.

568. ExxonMobil’s employees observed significant economic impacts on company reserves and resource base volumes as a result of being instructed to use lower costs than the publicly represented proxy cost. For example, an Imperial Oil employee indicated in an internal July 2016 email that the Company used an “alternate methodology” after application of the Corporate Plan guidance resulted in “massive GHG costs in the out years.” In addition, an internal meeting invitation from August 2016 concerning company reserves assessments in Alberta states: “Last year, after initial guidance to use the EM [Exxon] corporate forecast (despite warnings it would result in *large write-downs*) we had to redo our calculations using legislated GHG taxes” (emphasis added).

569. ExxonMobil’s decision not to apply the publicly represented proxy costs to its company reserves assessments, and instead to apply existing legislated costs, also had a particularly significant impact on its multibillion-dollar Cold Lake oil sands project in Alberta.

570. On October 9, 2015, ExxonMobil Reserves Coordinator wrote that “Corporate planning . . . recommend[s] using [Alberta] legislated price and intensity” (i.e., the percentage of emissions that would be subject to tax) to calculate Cold Lake reserves, which “will reduce the [end of field life] impact significantly.” In other words, by not applying the Corporate Plan and Outlook proxy cost, ExxonMobil projected that it would be profitable for the Company to continue producing at Cold Lake for a significantly longer period of time. As a result of these forecasts, ExxonMobil’s corporate planning department decided that existing Alberta “legislated price and intensity” should be used for Cold Lake reserves calculations. By not applying the publicly represented proxy costs, ExxonMobil inflated company reserves and resource base figures.

571. Because ExxonMobil did not apply its publicly represented proxy costs to its company reserves and resource base assessments for its oil sands assets in Alberta, its representations to investors, including Massachusetts investors, were materially false and misleading.

d) ExxonMobil's representations about its use of proxy costs were inconsistent with its internal practices for impairment evaluations.

(1) Prior to 2016, ExxonMobil misled investors by not incorporating proxy costs into cost projections for impairment evaluations.

572. Contrary to its representations to investors, ExxonMobil did not incorporate a proxy cost of greenhouse gas emissions in making cost projections for purposes of its impairment evaluations for any of its assets prior to its year-end evaluation in 2016. In particular, ExxonMobil did not incorporate such costs in determining whether impairment triggers related to future cash flows existed, or whether the carrying value of its assets was recoverable.

573. ExxonMobil's failure to apply a proxy cost in impairment evaluations violated GAAP, which requires the application of economic assumptions in impairment testing that are consistent with a company's internal projections and public statements. The Company's practices were therefore also at odds with its public representations that it was complying with GAAP.

574. Because ExxonMobil did not apply a proxy cost to its projected greenhouse gas emissions in its impairment evaluations and used cost assumptions for its impairment evaluations that differed from and were less costly than those it used for other business purposes, ExxonMobil's representations to investors, including Massachusetts investors, concerning its use of a proxy cost and the value of its assets were materially false and misleading.

- (2) *In 2016, ExxonMobil misled investors by incorporating proxy costs into cost projections for impairment evaluations in a limited, internally inconsistent manner.*

575. In its 2016 year-end impairment evaluations, ExxonMobil incorporated a proxy cost of greenhouse gas emissions into some of its cost projections for the first time, but even then did so in a limited and internally inconsistent manner that rendered its impairment-related representations materially false and misleading.

576. For example, ExxonMobil assumed for purposes of its year-end impairment evaluation for 2016 that it would bear no costs resulting from the emissions caused by its natural gas production, and that such emissions would have no effect on the value of its assets. Thus, the Company's representations that it applied assumptions in its impairment evaluations that were consistent with its business processes and public communications, such as its statements concerning the "consistent" application of a proxy cost of greenhouse gas emissions, were materially false and misleading.

577. These undisclosed practices meant that ExxonMobil did not apply a proxy cost of greenhouse gas emissions in certain of its impairment evaluations in 2016. ExxonMobil's failure to apply a proxy cost in impairment evaluations for 2016 consistently with its representations violated GAAP and was also at odds with its public representations that it was complying with GAAP.

578. Thus, ExxonMobil's representations that it followed the impairment-related accounting standards and applied assumptions to its impairment evaluations that were consistent with those set out in the Company's public communications and applied for other business purposes were materially false and misleading.

e) **ExxonMobil misrepresented its use of proxy costs in its demand projections.**

579. ExxonMobil has made numerous representations that it applied its proxy cost broadly across relevant economic sectors, including the transportation sector. For example, in its 2014 publication *Managing the Risks*, ExxonMobil stated that its proxy cost “seeks to reflect all types of actions and policies that governments may take over the Outlook period relating to the exploration, development, production, transportation or use of carbon-based fuels.”

580. ExxonMobil made the same or similar statements about the broad scope of the Company’s application of a proxy cost in numerous publications, including its 2014, 2015 and 2016 responses to the Carbon Disclosure Project, and its 2015 Corporate Citizenship Report.

581. Likewise, in its 2013 Outlook for Energy, after describing its proxy cost, ExxonMobil explained that “rising CO₂ costs will have a variety of impacts on . . . energy use in *every sector* and region within any given country” (emphasis added). In that report, ExxonMobil projected that energy demand will increase over the coming decades, and that this includes “[g]rowth in transportation sector demand.”

582. In ExxonMobil’s 2017 Form 10-K, the Company stated that its Outlook for Energy “seeks to identify potential impacts of climate-related policies, which often target specific sectors, by using various assumptions and tools *including application of a proxy cost of carbon* to estimate potential impacts on consumer demands” (emphasis added).

583. In practice, ExxonMobil did not apply the publicly represented proxy cost to the transportation sector as represented in projecting demand for oil and gas.

584. By failing to apply its proxy cost in the transportation sector as represented, ExxonMobil overestimated demand for its products, because applying a cost of greenhouse gas emissions would have suppressed future demand for oil and gas.

585. The transportation sector is important to ExxonMobil's overall business. ExxonMobil projects that oil, which accounts for roughly half of the Company's reserves and resource base, will remain the world's "largest source of energy," and that the transportation sector will be a key source of growth in oil demand. For example, in its 2017 and 2018 Form 10-Ks, ExxonMobil stated that it expects global demand for liquid fuels to grow by about 20 percent by 2040, and that it expects about 60 percent of this growth to derive from the transportation sector. Indeed, the transportation sector accounts for more than half of worldwide demand for crude oil.

586. Despite the importance of the transportation sector to its overall business, ExxonMobil did not apply the publicly represented proxy cost to demand projections in that sector as represented, thereby inflating the extent of that demand over time and understating the risks of climate change regulation to that demand, and never disclosed its failure to do so to investors.

587. ExxonMobil's 2018 Form 10-K for the first time states that the Company "estimates potential impacts of [climate change] policies on consumer energy demand by using various assumptions and tools – including, depending on the sector, application of a proxy cost of carbon *or assessment of targeted policies* (e.g. automotive fuel economy standards)" (emphasis added).

588. ExxonMobil did not disclose in its 2018 Form 10-K or thereafter that its prior representations had been inaccurate and that the Company did not use the proxy cost of carbon to project transportation sector demand and in other sectors as represented.

589. By failing to apply its proxy cost to demand projections in important sectors, ExxonMobil's representations to investors, including Massachusetts investors, about the extent

to which the proxy cost it publicly described was incorporated into its business decisions were materially false and misleading.

3. *ExxonMobil's proxy cost misrepresentations are material to Massachusetts investors.*

590. Climate change risks, including the transition risks that proxy costs are intended to help manage, are significant, especially to oil and gas companies, as described in Sections V.B, V.C., and V.D above. As set forth in those sections, ExxonMobil investors, including Massachusetts investors, are increasingly concerned about such risks to the Company and the Company's practices in managing those risks, including its application of a proxy cost of carbon in connection with its business decisions.

591. Conversely, ExxonMobil has engaged in a sustained effort over many years to market its securities to investors, including Massachusetts investors, with representations about the Company's application of a proxy cost of carbon across its businesses, including the timing, value, conservatism, and uses of that proxy cost, as set forth in Section V.F.1 above. Those representations have been false and misleading because they were at odds with the Company's internal practices in the manner described in Section V.F.2.

592. The disclosure of ExxonMobil's actual practices in light of its misrepresentations to Massachusetts investors about its use of proxy costs—and the fact that the Company would seek to deceive them in the face of such strong investor interest and scrutiny—would have influenced Massachusetts investors' decisions to purchase, sell, retain, or price ExxonMobil securities, and the Company's proxy cost misrepresentations are therefore materially false and misleading in violation of Chapter 93A.

G. ExxonMobil's Omissions and Misrepresentations to Massachusetts Investors Understated the Risks of Climate Change to Its Business, Provided Untenable Fossil Fuel Projects with Greater Access to Capital, and Were Detrimental to the Public Interest in Avoiding the Worst Harms of Climate Change.

593. ExxonMobil's omissions and misrepresentations about systemic climate risks and its use of a proxy cost of carbon were all the more egregious in light of its specific and highly scrutinized disclosures on climate risk from 2014 forward and the extensive investor interest and concern regarding the issue over the years. And ExxonMobil management, including Mr. Tillerson, knew of and approved of the omissions in its disclosures and its deviations from its publicly represented proxy costs.

594. By failing to disclose the systemic risks of climate change to its investors, ExxonMobil delayed and evaded market understanding of those risks and the associated capital reallocation decisions that would accompany accurate pricing of those risks. As a result, ExxonMobil and the fossil fuel industry maintained investor confidence and access to capital for billions of dollars of ongoing investments in new fossil fuel infrastructure, which are incompatible with global efforts to avert catastrophic warming of the climate.

595. Had ExxonMobil applied its proxy costs consistently with its public representations, it would have projected billions of dollars of additional climate-related costs. Because, contrary to its representations to investors, it did not incorporate such costs in its investment decision-making, business planning, and financial reporting, ExxonMobil's public disclosures significantly understated its financial vulnerability to climate change regulation, falsely reassuring its investors that it was appropriately accounting for climate risks and successfully and consistently "managing the risks" across the Company. The effect of understating climate-related costs was to inflate ExxonMobil's enterprise valuation, which is premised on the future cash flows from the Company's reserves and other fossil fuel resources.

596. Indeed, ExxonMobil's actual proxy cost practices had the intended effect of improving the apparent economics of ExxonMobil's most marginal projects, where faithful application of the publicly represented proxy costs would have increased their anticipated costs and affected the Company's investment decisions, reserve calculations, and impairment determinations. ExxonMobil's actual practices also understated the financial advantages of alternative cleaner projects.

597. Together, ExxonMobil's omissions and misrepresentations put its Massachusetts investors at increased risk of losses in the future, as greater recognition of the physical and transition risks of climate change to ExxonMobil, other fossil fuel companies, and the global economy increasingly diminishes the market valuation of ExxonMobil securities, potentially under sudden, chaotic, and disorderly circumstances.

598. ExxonMobil's unlawful conduct led to investments and funding commitments, including by Massachusetts investors, that impeded and deferred the essential transition to cleaner energy sources and systems and allocated capital to fossil fuel projects whose current and future greenhouse gas emissions make the worst potential harms from climate change to Massachusetts, the United States, and the world more likely to occur.

599. Overall, ExxonMobil's omissions and misrepresentations to investors about systemic climate risks and its use of a proxy cost of carbon had and continue to have the effect of promoting "predatory delay" in meaningful action to address climate change across the fossil fuel industry, the world's financial markets, and the global economy, that is, in the words of writer Alex Steffen, "the deliberate slowing of change to prolong a profitable but unsustainable status quo whose costs will be paid by others."

VI. EXXONMOBIL IS DECEIVING MASSACHUSETTS CONSUMERS THROUGH MISLEADING ADVERTISEMENTS THAT CLAIM USING EXXONMOBIL FOSSIL FUEL PRODUCTS REDUCES GREENHOUSE GAS EMISSIONS, FAILURES TO DISCLOSE THE IMPACT OF ITS FOSSIL FUEL PRODUCTS ON CLIMATE CHANGE, AND GREENWASHING CAMPAIGNS.

600. In the course of selling and marketing its fossil fuel products to Massachusetts consumers, ExxonMobil has engaged in intentional, concerted efforts to obfuscate the fact that the production and use of ExxonMobil's fossil fuel products emit large volumes of the dangerous greenhouse gas pollution that is causing disruptive climate change impacts. ExxonMobil's false and misleading misrepresentations are material because they directly influence a consumer's decision to purchase those products, have the capacity to affect consumer energy and transportation choices, and deter consumers from adopting cleaner, safer alternatives to ExxonMobil products.

601. In particular, ExxonMobil has misled and continues to mislead Massachusetts consumers by representing that their use of ExxonMobil's Synergy™ fuels and "green" Mobil 1™ motor oil products will reduce greenhouse gas emissions. ExxonMobil's advertising and promotional materials for those products are highly deceptive because ExxonMobil makes misleading representations about the products' environmental benefits and fails to disclose that the development, refining, and consumer use of ExxonMobil fossil fuel products emit large volumes of greenhouse gases, which are causing global average temperatures to rise and destabilizing the global climate system.

602. As part of the Company's overall marketing scheme to portray its products as safe and environmentally beneficial, ExxonMobil also has engaged in and is engaging in "greenwashing" campaigns directed at Massachusetts and other consumers that mischaracterize the Company and its activities.

603. “Greenwashing” constitutes advertising and promotional materials designed to convey a false impression that a company is more environmentally responsible than it really is, and so to induce consumers to purchase its products. Like “whitewashing,” “greenwashing” is a company’s effort to cover up facts that would reveal its harmful environmental impact.

604. ExxonMobil promotes its products by falsely depicting ExxonMobil as a leader in addressing climate change through technical innovation and various “sustainability” measures, without disclosing (i) ExxonMobil’s ramp up of fossil fuel production in the face of a growing climate emergency; (ii) the minimal investment ExxonMobil is actually making in clean energy compared to its investment in business-as-usual fossil fuel production; and (iii) ExxonMobil’s efforts to undermine measures that would improve consumer fuel economy.

A. ExxonMobil Markets and Sells Its Fossil Fuel Products to Massachusetts Consumers.

605. ExxonMobil gasoline, diesel fuel, and other fossil fuel-based products, such as motor oils, are sold throughout Massachusetts to Massachusetts consumers.

606. ExxonMobil ensures that its fossil fuel products reach Massachusetts consumers through (i) the way it controls the distribution of ExxonMobil-branded products to Massachusetts consumers, (ii) its sales and credit transactions related to fossil fuel product purchases by Massachusetts consumers, and (iii) its Massachusetts-directed advertising.

1. ExxonMobil controls how ExxonMobil-branded products are distributed to Massachusetts consumers.

607. ExxonMobil has sold its fossil fuel products in Massachusetts for many decades. Until 2010, ExxonMobil, directly or through subsidiaries, owned a large number of retail gas stations in Massachusetts and also sold ExxonMobil-branded fossil fuel products through independently owned retail gas stations.

608. Today, ExxonMobil-branded gasoline and other ExxonMobil fossil fuel-based products are sold at nearly 300 retail gas stations in Massachusetts under a variety of ownership and operation arrangements, all bearing the Exxon or Mobil banner.

609. A number of ExxonMobil subsidiaries are registered to do business in Massachusetts as foreign corporations, including its wholly-owned subsidiaries ExxonMobil Pipeline Company and ExxonMobil Oil Corporation, which maintain facilities in Massachusetts for transportation and distribution of fossil fuel products to Massachusetts customers.

610. With regard to the ExxonMobil fossil fuel products sold at gas pumps, ExxonMobil publicly represents to Massachusetts consumers that it delivers its fossil fuel products to its fuel storage terminals and that, at its terminals, it adds particular detergents and additives that it specifies to create its consumer-ready fossil fuel products, which are transported by truck to its ExxonMobil-branded retail service stations.

611. ExxonMobil directs Massachusetts consumers to this network of retail gas stations through its interactive website, which identifies the location of such stations by town and street address following the input of the consumer's location or zip code.

612. ExxonMobil directs and controls the creation, marketing, and sale of ExxonMobil-branded fossil fuel products sold at Massachusetts retail gas stations.

613. Specifically, Massachusetts retail gas stations that offer ExxonMobil-branded fossil fuel products sell those products pursuant to a Brand Fee Agreement ("BFA").

614. Under the BFA, ExxonMobil requires any wholesalers and retailers that sell the Company's branded products ("BFA Holders") in Massachusetts to create fossil fuel products sold at the pump by combining unbranded gasoline with ExxonMobil-approved additives sold by ExxonMobil-approved suppliers according to ExxonMobil's specifications.

615. Under the BFA, ExxonMobil closely controls the marketing and sales practices of Exxon- and Mobil-branded retail gas stations in Massachusetts by, among other things, requiring BFA Holders and branded retail gas stations to diligently promote the sale of Exxon- and Mobil-branded fuel products, through ExxonMobil-approved advertising and merchandising.

616. For example, Global Partners LP (“Global”) is a BFA Holder involved in over 100 Exxon- or Mobil-branded gas stations in Massachusetts. Global owns and operates some of those stations. Global also leases Exxon- and Mobil-branded gas stations to franchise dealers and sells Exxon- or Mobil-branded gasoline to its franchise dealers, which, in turn, sell that gasoline to Massachusetts consumers. Additionally, Global sells ExxonMobil-branded gasoline to retail gas stations in Massachusetts that are independently owned and operated by third parties and to gasoline distributors.

617. Pursuant to the BFA, Global, its franchisees, and third parties that purchase Exxon- or Mobil-branded gasoline from Global all must comply with ExxonMobil’s facility requirements, brand image requirements, advertising and sales promotion requirements, and minimum service standards. The same is true for other BFA Holders.

2. *ExxonMobil engages in sales and credit transactions related to the sale of its fossil fuel products with Massachusetts consumers.*

618. ExxonMobil developed and supports a smartphone application (“app”), the Rewards+ app (formerly known as the Speedpass+ app), through which Massachusetts consumers set up personal accounts and use the app as a payment platform for buying gasoline, diesel fuel, and other products at Exxon- and Mobil-branded retail gas stations located in Massachusetts.

619. ExxonMobil directly engages in business transactions in Massachusetts when Massachusetts consumers use the payment platform on the Rewards+ app to purchase gasoline,

diesel fuel, or other products at Exxon- or Mobil-branded retail gas stations located in Massachusetts.

620. ExxonMobil offers Massachusetts consumers credit through its ExxonMobil Smart Card credit card.

621. Using the ExxonMobil Smart Card, Massachusetts consumers make purchases on the credit card as a way to obtain discounts on gasoline at Exxon- and Mobil-branded retail gas stations. ExxonMobil is advertising the ExxonMobil Smart Card by offering 12 cents off every gallon of its Synergy™-brand fuel for the first two months (or, if the application is through the Rewards+ app, 50 cents off every gallon for the first two months) and by claiming, “Get the ExxonMobil Smart Card and you may never pay full price for gas again.” The ExxonMobil Smart Card also affords customers additional perks.

622. Massachusetts consumers can manage their ExxonMobil Smart Card accounts and pay their ExxonMobil Smart Card credit card bills through the ExxonMobil website or Rewards+ app.

623. ExxonMobil also sells ExxonMobil Gift Cards through Exxon- or Mobil-branded retail service stations in Massachusetts and unaffiliated retailers in Massachusetts that can be used to purchase gasoline and other fossil fuel products at Exxon- and Mobil-branded Massachusetts retail gas stations.

624. In the Rewards+ app, ExxonMobil promotes its products to Massachusetts consumers by falsely portraying its environmental performance. Its statements include claims that the Company has “[c]onscientious practices” and “[r]igorous standards” and that ExxonMobil is “continually innovating to develop products that enable customers to reduce their energy use and CO2 emissions.”

625. ExxonMobil also publishes statements about its Synergy™ fuel technology products to Massachusetts consumers through the “Our fuel” section of its Rewards+ app.

626. About its app, ExxonMobil recently said that “[n]othing is more important to us than protecting our customers That’s why we make a point to protect our customers with the ExxonMobil . . . mobile payment app,” which permits direct transactions with ExxonMobil’s “payment cloud.” The Company added that “[o]ne of our guiding principles is that [customer] payment and private information never goes down to the store” because “[i]t never leaves our payment cloud.”

627. ExxonMobil directs and controls the marketing of its Synergy™ fuel technology products for sale to Massachusetts consumers through the Company’s communications with and training of BFA Holders in Massachusetts.

628. For example, on June 21, 2016, ExxonMobil conducted a training of its branded wholesalers for ExxonMobil’s launch of Synergy™ fuels in the United States, including Massachusetts. The agenda for the training included topics such as “Synergizing Consumers” and “Synergizing Your Sites,” in which the Company spoke of amplifying its Synergy™ launch by having a significant Synergy™ television presence in the 2016 Summer Olympics in Rio and discussed creating Synergy brand and product awareness at retail sites with an integrated marketing campaign targeting ExxonMobil loyalty program members.

629. ExxonMobil conducted “Brand Champion” training sessions in 2016 and 2017, directed at BFA Holders, designed to provide in-depth training on ExxonMobil’s marketing programs, with a training dedicated to “Implementing Synergy.” In the briefing and preparation document for the “Brand Champion” training, ExxonMobil recognizes that it is ExxonMobil’s

own marketing programs for its Synergy™ fuel technology products that are implemented at the ExxonMobil retail sites.

3. *ExxonMobil sells other fossil fuel products to Massachusetts consumers.*

630. Beyond the pumps at gas stations, ExxonMobil sells other fossil fuel products, including engine lubricants such as its Mobil 1™ motor oil products, to Massachusetts consumers through retailers in the Commonwealth like Target, Home Depot, Consumer Auto Parts, Costco, Pep Boys, Walmart, AutoZone, NAPA Auto Parts, O'Reilly Auto Parts, and Advance Auto Parts.

631. ExxonMobil directs Massachusetts consumers to retailers that carry Mobil 1™ motor oil products through its interactive website, which identifies nearby retailers by town and address following input of location or zip code.

632. As described below, ExxonMobil directly advertises these retail products to Massachusetts consumers. ExxonMobil also provides advertising and marketing support directly to non-gas station retailers that offer ExxonMobil-branded fossil fuel products in Massachusetts.

4. *ExxonMobil advertises its fossil fuel products in Massachusetts.*

633. In addition to providing advertising support to BFA Holders and retail stores that sell its branded products, ExxonMobil advertises its fossil fuel products in Massachusetts through all types of media, including radio, television, print media, conspicuous highway signage, its website, and distribution of promotional materials to Massachusetts consumers.

634. For example, ExxonMobil has run Massachusetts-specific advertisements for its fossil fuel products over Massachusetts radio stations and in the *Boston Globe* and the *Lowell Sun*.

635. ExxonMobil advertises itself, as of March 1, 2018, as the “Official Motor Fuel Partner of the Boston Celtics,” launching a multi-year marketing partnership with the team that

included “an official 180-degree photo experience event” on March 20, 2018 at Boston’s TD Garden, and promotional videos with Celtics personalities at ExxonMobil-branded gas stations in Massachusetts. This partnership is a further example of a specific ExxonMobil effort to target and sell its motor fuel and other products to Massachusetts consumers.

636. ExxonMobil is running a series of paid full-page ads in print editions and posts in the electronic edition of *The New York Times*, with the objective of reaching Massachusetts consumers. In these greenwashing ads, ExxonMobil falsely portrays itself as a clean energy leader, focused on efforts to develop energy from alternate, allegedly environmentally preferable sources like algae and plant waste.

637. ExxonMobil also markets its ExxonMobil Rewards, Loyalty, and Speedpass+ programs through influencer marketing campaigns that reach Massachusetts consumers. For example, ExxonMobil recently engaged its advertising agency, Weber Shandwick, one of the world’s leading communications and marketing services firms according to its website, to vet, recommend, and secure a YouTuber and three Instagram influence partners, to educate their subscribers about the benefits of the ExxonMobil Rewards program. The goal of the campaign was to acquire new users of ExxonMobil Rewards+.

638. ExxonMobil also engaged Weber Shandwick to develop a similar influencer campaign for its Speedpass+ program that targeted “social personality influencers,” including two to three top tier YouTube influencers. ExxonMobil’s advertising agency was to participate in ongoing calls with influencers on the “message train,” and the goal of this influence campaign was to educate influencer audiences about the benefits of Speedpass+.

639. ExxonMobil engages Weber Shandwick to develop social personality influencer marketing plans because influencers “have a powerful impact on consumers during the decision-

making process [and] have the ability to increase brand awareness, consideration and intent/recommendation.” ExxonMobil’s influencers are vetted by Weber Shandwick to avoid those with climate change or global warming opinions that could be contrary to ExxonMobil’s interests.

B. ExxonMobil Misleads Consumers by Claiming Its Fossil Fuel Products Reduce Carbon Dioxide Emissions; Deceptively Fails to Disclose in Its Advertising Material Information About the Dangers to Consumers of Using Its Fossil Fuel Products; and Misleadingly Greenwashes Its Brand by Falsely Presenting Itself as an Environmentally Responsible Clean Energy Innovator, When in Fact, ExxonMobil’s Products Are a Leading Cause of Climate Change.

640. ExxonMobil’s advertisements and promotional materials, including those directed through BFA Holders under its control, deceptively misrepresent to Massachusetts consumers that a climate benefit is derived from the use of its fossil fuel products.

641. ExxonMobil deceives Massachusetts consumers by failing to disclose in advertisements and promotional materials directed at them that the development, production, refining, and consumer use of its fossil fuel products—including gasoline and motor oil—emit large volumes of greenhouse gases, which are causing global average temperatures to rise, resulting in a substantial increase in deadly extreme weather events, coastal property damage, disruptions of fisheries, the spread of vector-borne diseases, large-scale ecosystem disruption, and other unprecedented threats to human populations.

642. ExxonMobil’s advertisements and promotional materials, therefore, fail to disclose the extreme safety risk associated with the use of ExxonMobil’s dangerous fossil fuel products, which are causing potentially “catastrophic” climate change, in the words of Exxon’s own scientists decades ago.

643. ExxonMobil’s misleading statements about its fossil fuel products and its failure to disclose that the use of its products is causing dangerous climate disruption are particularly

deceptive given the stark contrast between the Company's long internal knowledge of the role its fossil fuel products play in causing climate change and the extensive marketing statements in which the Company promotes the purported environmental benefits of those same products.

644. Specifically, ExxonMobil misleadingly represents that consumer use of its Synergy™ and “green” Mobil 1™ products reduces greenhouse gas emissions, at most a half-truth that renders its advertising and promotional materials for those products highly deceptive, since ExxonMobil also fails to disclose the fact that the production and consumer use of fossil fuel products like Synergy™ and “green” Mobil 1™ are a leading cause of climate change that endangers public health and consumer welfare.

645. ExxonMobil's misleading statements and omissions are deceptive because, even if it is technically true that Synergy™ and Mobil 1™ improve internal combustion engine performance and/or efficiency relative to prior or other products, ExxonMobil's claims that these products help reduce greenhouse gas emissions convey a false impression that using the products results in environmental benefits. To the contrary, the development, production, refining, and consumer use of ExxonMobil fossil fuel products (even products that may yield relatively more efficient engine performance) *increase* greenhouse gas emissions.

646. ExxonMobil's extensive greenwashing representations, in which ExxonMobil presents itself to Massachusetts consumers as an environmentally responsible corporate citizen concerned about climate change and leading innovative efforts to develop low carbon fuels, are part of ExxonMobil's overall marketing and branding strategy. ExxonMobil's greenwashing representations are misleading because, contrary to those messages, ExxonMobil remains laser-focused on increasing fossil fuel production and is actively engaged in delaying action to reduce emissions, including by waging a secretive campaign to fight the very fuel economy and

emission standards for passenger vehicles that help consumers save fuel and money and limit pollution from vehicles.

1. ***ExxonMobil deceptively promotes its Synergy™ and “green” Mobil 1™ products as “solutions” for combatting climate change while failing to disclose its knowledge that production and use of those products causes climate change.***

a) Promotion of Synergy™ fuels

647. In July 2016, ExxonMobil rolled out its Synergy™ fuel and forecourt imaging across its U.S. branded network, including the over 300 ExxonMobil branded stations in Massachusetts.

648. All gasoline sold at ExxonMobil-branded stations in Massachusetts has received the ExxonMobil Synergy™ additive, and therefore constitutes ExxonMobil’s Synergy™ fuel.

649. Since 2013, ExxonMobil has spent over \$100 million on advertising and promotion of ExxonMobil gasoline, including Synergy™ fuel.

650. Promotional materials for Synergy™ appearing on ExxonMobil’s website, accessible in Massachusetts, feature a photograph of a mountain sunrise with trees in the foreground and text expressly representing that its Synergy™ products help reduce greenhouse gas emissions (bold in original; emphasis added):

Environmental performance.

Conscientious practices. Rigorous standards.

Continually improving environmental performance while pursuing reliable and affordable energy.

Ten years ago, we introduced Protect Tomorrow. Today. – a set of expectations that serves as the foundation for our environmental performance. Guided by a scientific understanding of the environmental impacts and related risks of our operations, these rigorous standards and good practices have become an integral part of our day-to-day operations in every country in which we do business including those with minimal regulations in place. . . .

The following are the three major areas in which we've concentrated our efforts to reduce environmental impacts. . . .

Improve efficiency in consumer use of fuels

We're continually innovating to develop products that enable customers to reduce their energy use and CO2 emissions. For example, we have:

Developed specially formulated synthetic lubricants for cars, trucks and industrial equipment that last longer and help end-users reduce their energy consumption

Created tire liners that retain air better than their predecessors, thereby improving vehicle fuel efficiency. . . .

*Engineered Fuel Technology Synergy™ fuels to help improve fuel economy and reduce CO2 emissions**⁵*

651. A screenshot of relevant portions of the ExxonMobil webpage featuring this promotion is reproduced below.

[remainder of page intentionally blank]

⁵ The double-asterisk refers to the following statement at the bottom of the page: "Fuel economy improvement is based on Synergy-branded gasoline compared to gasoline meeting minimum U.S. government standards. Actual benefits will vary based on factors such as vehicle type, driving style and gasoline previously used."

Business lines
Global brands
Select location

Exxon Mobil
Fuels
Quality fuels
Earn pay and save
Motor oil
Our stations
About us & FAQs

Exxon
Home
About us
Environmental performance

Environmental performance

Conscientious practices. Rigorous standards.

Continually improving environmental performance while pursuing reliable and affordable energy

Ten years ago, we introduced *Protect Tomorrow. Today.* – a set of expectations that serves as the foundation for our environmental performance. Guided by a scientific understanding of the environmental impacts and related risks of our operations, these rigorous standards and good practices have become an integral part of our day-to-day operations in every country in which we do business including those with minimal regulations in place.

As well, we consider the long-term social and economic needs of the communities in which we work and continually engage stakeholders in the process.

The following are the three major areas in which we've concentrated our efforts to reduce environmental impacts.

Improve the efficiency of our operations

ExxonMobil invested more than \$1.5 billion over the last six years to improve efficiency and reduce greenhouse gas emissions from our operating facilities, such as refineries and chemical plants. In the past ten years we have reduced greenhouse gas emissions in our operations by more than 7 million metric tons, which is the equivalent of taking about 1.4 million cars off the road.

Improve efficiency in consumer use of fuels

We're continually innovating to develop products that enable customers to reduce their energy use and CO2 emissions. For example, we have:

- Developed specially formulated synthetic lubricants for cars, trucks and industrial equipment that last longer and help end-users reduce their energy consumption
- Created tire liners that retain air better than their predecessors, thereby improving vehicle fuel efficiency
- Developed a technology to improve the separator films used in lithium-ion batteries, which are used in laptops, cell phones and, increasingly, hybrid vehicles
- Engineered Fuel Technology Synergy™ fuels to help improve fuel economy and reduce CO2 emissions**

652. As part of its Energy lives here™ campaign, in its advertisements for its Synergy™ fuel, including in labelling on gasoline pumps at ExxonMobil-branded gas stations in Massachusetts, which the Company controls, ExxonMobil claims that the fuel will “take you further,” and contains more detergents than required by the Environmental Protection Agency, earning it the so-called “Top Tier” certification:

At Exxon and Mobil, we pay attention to every last detail. That includes carefully formulating the 7 meticulously balanced ingredients in Synergy™ gasoline – painstakingly designed and tirelessly tested to take you further.

Exxon and Mobil Synergy™ gasoline contains significantly higher quantities of detergents than required by the Environmental Protection Agency (EPA) and has passed key performance tests resulting in it being certified TOP TIER.

653. Top Tier certification is awarded by automobile manufacturers to fuels that they believe enhance engine performance, potentially resulting in decreased pollutant emissions and increased fuel economy.

654. ExxonMobil has made and continues to make repeated, similar representations in its advertising regarding the “cleanness” and fuel efficiency benefits of its Top Tier-certified Synergy™ fossil fuel product, which are misleading without mention of the key role fossil fuels play in causing climate change:

“When you fill up [at] an Exxon™ or Mobil™ station, you can be confident you’re getting TOP TIER gasoline, every time. Available in three octane levels, our Synergy™ gasoline has been engineered with 7 key ingredients and developed to clean up intake valves, which help improve gas mileage and performance.”

“Formulated for efficiency. We’re obsessed with efficiency and giving you better gas mileage. It’s why we meticulously engineer all three grades of Synergy™ gasoline.”

“Synergy™ fuel is meticulously engineered for better gas mileage.”

“Synergy Diesel Efficient™ fuel was created to let you drive cleaner, smarter and longer. Formulated with the latest breakthrough technology — and rigorously tested in the lab and on the road — it is the first diesel fuel widely available in the US with a proprietary formulation that helps: Increase fuel economy — so you can go more miles on every tank.”

“Learn more about our Synergy™ gasoline, engineered with 7 key ingredients to help you get better gas mileage.”

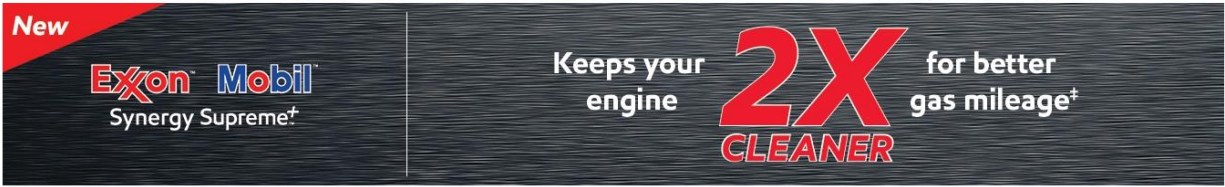
655. On a promotional webpage on ExxonMobil’s website titled, “Providing solutions for customers,” ExxonMobil represents that it is “developing products that help customers reduce their emissions and improve their energy efficiency. For example, we are . . .

[d]eveloping premium high efficiency fuels and lubricants.” The Company expressly states that “ExxonMobil produces fuels and lubricants that deliver improved vehicle efficiency, reduce emissions, and reduce used oils,” and references the Synergy™ gasoline product, along with its line of synthetic lubricants. The webpage nowhere mentions ExxonMobil’s leading role, as set forth above, in developing, producing, refining, and selling massive volumes of the fossil fuel products that are causing dangerous climate change.

656. Similarly, without disclosures about the impact on climate change, ExxonMobil hawks its Synergy Diesel Efficient™ fuel as the “latest breakthrough technology,” and the “first diesel fuel widely available in the US” that helps “increase fuel economy” and “[r]educe emissions and burn cleaner,” and “was created to let you drive cleaner, smarter and longer.”

657. ExxonMobil recently rolled out a new Synergy product, “Synergy Supreme+,” targeted to purchasers of so-called “premium” gasoline. The messaging for this product developed by Weber Shandwick represents that Synergy Supreme+ is “Our Best Fuel Ever,” and “2x Cleaner for Better Gas Mileage.” According to ExxonMobil, Synergy Supreme+ will enhance vehicle fuel economy in newer engines designed to meet tougher vehicle emissions standards.

658. A screenshot of the promotional webpage on ExxonMobil’s website for its Synergy products, with its claims that Synergy™ gasolines are “engineered for: [b]etter gas mileage” and “[l]ower emissions” and that Synergy Supreme+ is “2X Cleaner,” appears below.



Our Synergy™ gasolines are engineered for:



Better gas mileage

Helps improve your vehicle's fuel economy by reducing engine deposits.^{§§}



Lower emissions

Helps remove deposits, which can lead to fewer emissions.^{§§}



Improved engine protection

Helps protect intake valves and all types of injectors from deposits.^{§§}



Better performance

Helps prevent harmful deposits to rev up your engine's responsiveness.^{§§}

659. None of the foregoing advertisements advises consumers of what ExxonMobil has long known—that the production and use of its fossil fuel products, including now Synergy™ and Synergy Supreme+™, are a leading cause of climate change.

660. In addition, at the same time ExxonMobil has been actively promoting its Synergy™ gasoline and claiming it is “developing products that help customers reduce their emissions and improve their energy efficiency”—intentionally creating a misimpression that ExxonMobil is helping to protect consumers and the environment from climate change—ExxonMobil has been massively expanding fossil fuel production, and therefore, increasing emissions. For example, ExxonMobil is surging production in the Permian Basin, a shale oil field located in western Texas and southeastern New Mexico, to reach one million barrels per day of oil equivalent by 2024, an *eighty percent* increase.

661. Commenting on ExxonMobil’s “gamble” on growth, *The Economist* in a February 2019 article noted ExxonMobil’s corporate strategy is “at odds with efforts to hold back climate change.”

662. ExxonMobil's 2019 Energy and Carbon Summary, issued in February 2019, deceptively highlights ExxonMobil's purported leadership in addressing the risk of climate change, despite the fact that the report projects increasing demand for ExxonMobil's oil, particularly for use in the transportation sector, and \$21 trillion in total anticipated cumulative oil and gas investment globally through 2040. Even under a scenario in which governments restrict the use of fossil fuels to limit warming to 2 degrees C above pre-industrial levels, ExxonMobil concludes that there will still be huge demand for its fossil fuels, including potential total cumulative investment in oil and gas that could exceed \$13 trillion.

663. Nevertheless, in the 2019 Summary, ExxonMobil claims that "[o]ur actions to address the risks of climate change, which are prioritized under the four pillars below, position ExxonMobil to meet the demands of an evolving energy system." One of those "pillars" is "[p]roviding products to help our customers reduce their emissions," and specifically represents that the ExxonMobil Synergy™ fossil fuel product line reduces greenhouse gas emissions: "We leverage our competitive manufacturing assets to produce high-quality products such as Synergy-brand gasoline, Diesel Efficient-brand diesel fuel, marine fuels and aviation fuels. Our lubricants help minimize operational costs through improved energy efficiency and extended equipment life. Synergy fuels yield better gas mileage, reduce emissions and improve engine responsiveness."

664. The 2019 Summary also fails to mention that ExxonMobil's operations and consumer use of its products have been and continue to be one of the single largest sources of greenhouse gas emissions on the planet, or that from the late 1980s through 2015, ExxonMobil, among all U.S. companies and non-government-controlled global fossil fuel producers, was the single largest source of greenhouse gases.

b) Promotion of “green” Mobil 1™

665. In addition to Synergy™ fuels, ExxonMobil misleadingly promotes “green” Mobil 1™ motor oil in Massachusetts as an environmentally friendly product with low environmental impact.

666. ExxonMobil “green” Mobil 1™ is a synthetic oil used for engine lubrication. Synthetic oils are typically extracted from petroleum, including crude oil and its byproducts.

667. Since 2013, ExxonMobil has spent a total of \$135 million on advertising and promotion of its line of Mobil 1™ synthetic oils.

668. ExxonMobil also publishes online content under the banner “Energy Factor,” wherein ExxonMobil claims that it is “develop[ing] safe and reliable energy sources for the future.” The Energy Factor webpage includes posts such as “Green Motor Oil? ExxonMobil Scientists Deliver an Unexpected Solution,” in which ExxonMobil promotes its green-colored motor oil, posting a heading in bold typeface, “**Green Mobil 1**,” stating: “The test data succeeded in changing their perspective of viewing engine oil as a commodity, to considering it as an essential element of modern engine design, which can contribute to their carbon dioxide emission-reduction efforts.”

669. ExxonMobil produced a fifty-four second commercial promoting its “green” Mobil 1™ engine oil that can be viewed on YouTube.⁶

670. The video opens with shots of a silver can of Mobil 1™ oil in the spotlight, and spinning race car tires, while a voiceover tells viewers that, over forty years ago, Mobil created the world’s leading synthetic motor oil. At approximately seven seconds, the voiceover describes this discovery as “an innovation that has driven some of the greatest achievements on Earth, and

⁶ <https://www.youtube.com/watch?v=dga50ik0euU> (accessed October 24, 2019).

above it” while a color photograph of Earth as seen from space—and reflected in the visor of an astronaut’s spacesuit helmet—spins before the viewer. The image of the earth in the Mobil 1™ advertisement is virtually indistinguishable from and unmistakably meant to invoke the famous “Earthrise” photograph, which has been an iconic symbol of environmental causes since the late 1960s.

671. “With every new generation,” the voiceover intones, Mobil 1™’s engineers have long looked to “solve the challenges of the day with the technology of tomorrow,” as an aerial image of a mandala-like, stylized and tree-lined traffic circle appears, and then dissolves into a spinning green disc—the green lid of the “green” Mobil 1™ oil. The viewer is assured that “in a world that is now demanding more progress and change than ever before,” Mobil has produced a motor oil “so advanced it can help enhance engine performance and improve fuel economy,” while the video shows the green lid flipping open to reveal luminescent, sparkling green motor oil pouring from the neck of the bottle. The commercial closes with a picture of the “green” Mobil 1™ advanced synthetic motor oil in a gray plastic bottle, with a green lid and green-colored label. A still from the video featuring the green-colored Mobil 1™ oil appears below.



672. ExxonMobil also promotes the use of its “green” Mobil 1™ product through sponsorships, including the NASCAR “Race to Green,” where ExxonMobil endeavors to “spotlight[] environmental and sustainability awareness as an official NASCAR® Race to Green™ partner, sharing the benefits of new Mobil 1™ Annual Protection motor oil with the motorsports industry and consumers.” By reducing the number of required oil changes, ExxonMobil represents that widespread use of “green” Mobil 1™ could substantially reduce the amount of used oil generated, resulting in significant environmental benefit. Yet, as with its promotion of Synergy™, ExxonMobil fails in its promotion of “green” Mobil 1™ to disclose the fact that fossil fuels are a leading contributor to climate change and that current levels of fossil fuel use—even purportedly “cleaner” or more efficient products—represent a direct threat to sustainability of human communities and ecosystems.

673. In July 2018, ExxonMobil engaged Weber Shandwick to perform “content capture” of photography from an “Earth Day Drive Away” sweepstakes event promoting ExxonMobil “green” Mobil 1 products in Amesbury, Massachusetts. To be eligible to win an “eco-friendly” sport utility vehicle, participants had to purchase 5 quarts of “green” Mobil 1™ motor oil, or obtain a Mobil 1 oil change at a Walmart Auto Care Center, or recycle used oil at any participating location. Promotional photos of the event are available on the ExxonMobil website.

674. ExxonMobil’s public relations strategy misleadingly sought to affiliate in the minds of Massachusetts consumers the “green” Mobil 1™ product with Earth Day, with “greenness” and with “eco-friendliness,” when in fact exploration, production, refining, sales, and use of Exxon’s products are contributing to dangerous disruption of Earth’s climate, and the demise of ecosystems that support human life. Nowhere in the Earth Day Drive Away

promotional materials does ExxonMobil disclose the danger to the environment, public health, and communities posed by use of its fossil fuel products, including Mobil 1™.

2. *ExxonMobil's Synergy™ and "green" Mobil 1™ advertising is deceptive because the Company misleadingly represents that using those products helps consumers reduce their greenhouse gas emissions and fails to disclose that the use of such fossil fuel products is the leading cause of climate change.*

675. ExxonMobil's Synergy™ and "green" Mobil 1™ advertising misleadingly promotes the products as environmentally beneficial and designed to "help" consumers reduce greenhouse gas emissions, while omitting any mention of the Company's knowledge that production and combustion of fossil fuel products is the leading cause of climate change, and that, in the words of an Exxon scientist thirty-five years ago, "[w]e can either adapt our civilization to a warmer planet or avoid the problem by sharply curtailing the use of fossil fuels."

676. ExxonMobil's advertising deceives Massachusetts consumers by failing to disclose the enormity of ExxonMobil's greenhouse gas emissions on a global scale—including emissions associated with development, refining, and normal consumer use of its products—and the fact that any potential emissions-reducing benefits of its Synergy™ and "green" Mobil 1™ products are miniscule by comparison with the emissions generated by ExxonMobil's business.

677. By hyping claimed climate and "green" benefits while concealing its full knowledge of the dangerous climate change effects of continued high rates of fossil fuel use, ExxonMobil's advertising creates an overall misleading picture that hides the dire climate impacts resulting from normal consumer use of the Company's products.

678. ExxonMobil's advertisements are deceptive because they promote the false idea that ExxonMobil's Synergy™ and "green" Mobil 1™ are "green" or climate protective, and because the advertisements do not disclose what ExxonMobil has long known: that the continued use of these products is contributing significantly to climate change, and that, to have any hope

of stabilizing warming at a safer level, humankind must substantially reduce the use of fossil fuels, such as ExxonMobil's products, that are causing climate change.

679. In this regard, ExxonMobil's marketing of its new Synergy™ and "green" Mobil 1™ products as "safe," "clean," emissions-reducing, and beneficial to the climate—when production and use of such products is the leading cause of climate change—is reminiscent of the tobacco industry's effort to promote "low-tar" and "light" cigarettes as an alternative to quitting smoking, after the public became aware of the life-threatening health harms associated with smoking.

680. ExxonMobil's Synergy™ and "green" Mobil 1™ product promotions are positioned to reassure consumers that use of those products is beneficial in addressing climate change, when indeed, any continued large scale use of such fossil fuels is extremely harmful, just as the tobacco companies' misleadingly promoted "low tar" and "light" cigarettes as a healthier, less harmful choice, when the tobacco companies knew any use of cigarettes was harmful.

681. As with the images used by ExxonMobil to affiliate its products with the Earth, Earth Day, and a clean and healthy environment, the tobacco industry used in its advertising for "low tar" and "light" cigarettes analogous images of athletes, wellness, and success to disassociate in consumers' minds the connection between smoking, cancer, illness, and death. An example of these images appears below.



682. Like the tobacco companies’ misleading use of scientific and engineering terms and images in advertising to enhance the credibility of their representations, ExxonMobil’s promotions for its Synergy™ and Mobil 1™ products also misleadingly invoke similar terminology to falsely convey to Massachusetts consumers that use of these products benefits the environment.

683. Advertising for Decade brand cigarettes, for example, referenced a “patented tobacco flavorant,” “modern laser technology,” “exclusive research design,” and the “total system” of cigarette manufacturing developed by Decade over a ten-year period to deliver a “low tar” cigarette. An image of Decade’s advertisement appears below.



**IT TOOK TEN YEARS
TO DEVELOP A "TOTAL SYSTEM"
THAT DELIVERS REAL TASTE
IN A LOW 'TAR' CIGARETTE.**

A low 'tar' cigarette is a complex system of interacting parts.
The tobacco. The filter. And even the paper.
Decade is the first low 'tar' in which all the parts have been arranged in perfect balance with each other. This is the Decade "Total System." And this is why Decade is the first low 'tar' with a taste worth smoking.

The Tobacco. "Flavor Packing" plus fifteen tobaccos boost taste.
We've developed a system called "Flavor Packing" that allows us to concentrate a special patented tobacco flavorant in each Decade cigarette. This is in addition to our special taste blend of fifteen fine tobaccos, including exotic Turkish, full bodied Burley, and Bright, a tobacco known for its smoothness.

The Filter. Unique "Taste Channel" gives first puff impact.
The Decade filter is a combination of modern laser technology, plus our own exclusive research design. Simply, we've created a channel within the filter to give you that first puff impact you've come to expect from only the higher 'tar' cigarettes. Which means you get taste from first puff to last.

The Paper. High porosity paper controls burn rate.
For Decade we use only high porosity-cigarette paper. Ordinary paper inhibits the burn rate, which can diminish the taste and create the need to pull harder when you drag. With Decade's high porosity paper however, you get an efficient burn rate that delivers optimum taste with a minimum of 'tar'.

The result. A completely new kind of low 'tar' cigarette.
So try a pack of Decade for yourself. Regular or Menthol. And after one taste we think you'll agree that our last 10 years were well worth the effort.



Regular and Menthol.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

© Liggett Group Inc. 1977

5 mg. "tar", 0.5 mg. nicotine av. per cigarette by FTC method.

684. ExxonMobil's promotional materials for Synergy™ and "green" Mobil 1™ similarly reference "meticulous[] engineer[ing]," "breakthrough technology," "rigorously tested in the lab," "proprietary formulation," "test data," "engineers," "innovat[ion]," and the claim that "Scientists Deliver [] Unexpected Solution[s]."

685. As with the tobacco companies' use of scientific terms to promote "light" cigarettes, ExxonMobil's claim that its purportedly high tech, innovative new fossil fuel products help consumers reduce emissions, even if true or partially true, render its promotional materials even more misleading, because they seek to convey—with the imprimatur of scientific credibility—an overall message that is false, and contradicted by ExxonMobil's own decades old internal knowledge: that ExxonMobil's products are environmentally beneficial and climate protective.

686. Indeed, ExxonMobil understands and strives to build, through its branding, an image of the Company as a trusted energy expert and leader in technology; in recent correspondence with Weber Shandwick, ExxonMobil’s Pablo Conrad relayed that “Technology Leadership has been framing our thinking and communications over the past few decades.” ExxonMobil has carefully crafted this brand image to ensure consumers believe ExxonMobil’s deceptive messaging and buy what it is selling—regardless of the harm ExxonMobil knows its products will cause to those consumers, their children, and future generations.

3. *ExxonMobil’s “greenwashing” representations mislead Massachusetts consumers by portraying ExxonMobil as an environmentally responsible company and clean energy innovator.*

687. ExxonMobil’s greenwashing misleads consumers by saturating its brand with deceptive “green” images that portray ExxonMobil as a good environmental steward when, in fact, these images are contradicted by the actual environmental and public health impact of ExxonMobil’s business. These images direct attention away from the massive and dangerous climate and public health harms caused by the routine production and use of ExxonMobil fossil fuel products and focus consumer attention instead on ExxonMobil’s purported environmental responsibility and leadership.

688. Following the wave of environmental disasters in the United States that gave rise to the modern environmental movement and the federal environmental statutory framework governing air and water pollution, hazardous pollution, and species protection, among others, the American public became much more aware of and concerned about the impacts of industrial pollution. The term “greenwashing” first was used in the 1980s to describe disinformation disseminated by a company to present an environmentally responsible public image that contradicted its actual environmental practices and record.

689. In the ensuing decades, investors and consumers have become increasingly interested in the environmental performance of companies that produce the goods and services they purchase. Seeking to induce consumers to purchase their products by presenting themselves in a positive environmental light, companies like ExxonMobil—a leader in one of the world’s most polluting industries—greenwash their corporate images, products, and reputations by distorting the truth or misrepresenting their environmental performance.

690. From at least the 1970s, ExxonMobil has designed, produced, and published various greenwashing marketing campaigns.

691. For example, in a litigated trademark dispute with Kellogg Company in 2001 concerning ExxonMobil’s use of a cartoon tiger, ExxonMobil relied on evidence of its motive for launching a greenwashing campaign following the 1989 Exxon Valdez oil spill. In response to the extremely negative public reaction to the spill, which included an organized boycott of Exxon products, Exxon reintroduced widespread use of its cartoon tiger, but portrayed the tiger differently than it had in the past. As ExxonMobil’s artist testified, “[t]oday’s Tiger is now cast in a more humanitarian role. He is polite to the elderly, plants trees for ecology and has an overall concern for the environment.”

692. With respect to climate change, ExxonMobil has designed, produced, and published various greenwashing campaigns that reached Massachusetts consumers and (i) conceal the fact that the production, distribution, and use of ExxonMobil’s fossil fuel products is a major source of the greenhouse gas emissions causing dangerous climate change; (ii) conceal ExxonMobil’s historical climate change denial and deceit by hypocritically touting itself as an exemplary environmental corporate steward; and (iii) mislead consumers about ExxonMobil’s

efforts to address climate change and the need for consumers to reduce their consumption of fossil fuels.

693. Those marketing campaigns include, for example, campaigns known as “Protect Tomorrow. Today.,” “Energy Solutions,” “Energy lives here,” “That’s Unexpected Energy,” and “The Future of Energy,” some of which ExxonMobil continues to run through various media, including print, radio, the Company’s websites, and social media. Many of these campaigns misleadingly highlight ExxonMobil’s investments in alternatives to fossil fuels, which are miniscule in comparison with its investments in fossil fuel development. ExxonMobil also greenwashes through the publication of its “Corporate Citizenship” and “Sustainability” reports.

- a) **ExxonMobil’s “Protect Tomorrow. Today.” campaign misleadingly casts ExxonMobil as a company that takes action to combat climate change to protect future generations when it has intentionally delayed action.**

694. Beginning in or around 2004 and continuing to date, ExxonMobil’s advertisements have included a public relations campaign called “Protect Tomorrow. Today.” (“ExxonMobil Protect Tomorrow Campaign”).

695. As part of the ExxonMobil Protect Tomorrow Campaign, ExxonMobil, among other things, produced and posted on the Internet through its own website and a variety of social media platforms a video called “Protect Tomorrow. Today.” (“Protect Tomorrow Video”), in which ExxonMobil makes misleading environmental claims and uses as a logo a misleading “green” image of water, mountains, and the sun:



696. ExxonMobil has used a black and white version of this logo in newspapers circulated to Massachusetts consumers since at least the late 1990s.

697. The Protect Tomorrow Video proceeds as follows:

Neil Duffin, then President, ExxonMobil Development Company: (0:00) Protect Tomorrow. Today. This defines our approach to the environment. Much the same way “Nobody Gets Hurt” defines our expectations for safety. The environment we work in includes clean air, water, and ecosystems, which people, plants, and animals depend upon.

Mark Pratt, then Safety, Health and Environment Manager, ExxonMobil Cepu Limited: (0:25) “Protect Tomorrow. Today.” means that we need to be very considerate of what we do today in order to protect the environment for future generations.

Mike Honderich, then Deputy JV Operations Director, Mobil Producing Nigeria Unlimited: (0:36) Our neighbors have high expectations that we operate responsibly and sustainably, and we don’t want to let ’em down.

Noa Gimelli, then Major Program Officer, Corporate Citizenship: (0:45) It means a lot to me that my company, the company that I work for, takes this seriously, that it embeds the very best practices into all of its operations when it comes to the environment.

Sam Roxburgh, then Project Execution Manager, ExxonMobil Development Company: (0:56) Protecting the environment is, is critically important.

Mike St. Croix, then Project Developer, ExxonMobil Environmental Services Company: (1:00) And I want the environment to be in a great condition for me in the future and for generations after us.

Romeo Perez, then Business Development Manager, XTO Energy Inc.: (1:07) So it makes me feel good every day to come to work for a company that has that at the forefront and the focus of what it is that we do.

Duffin: (1:14) “Protect Tomorrow. Today.” is much more than just a phrase. It is a core value to ExxonMobil employees and business partners, everywhere we do business.

[SERIES OF QUOTES IN FOREIGN LANGUAGES meaning “Protect Tomorrow. Today.”]

Voiceover: “Protect Tomorrow. Today.”

698. The ExxonMobil video and logo falsely depict the Company as a good corporate environmental citizen, while omitting any mention of the harms of climate change caused in large part by development, refining, and consumer use of fossil fuels, ExxonMobil’s chief product. The clean water supply and healthy mountain ecosystem depicted in ExxonMobil’s “Protect Tomorrow. Today” logo are precisely the types of ecological systems threatened by climate change caused by ExxonMobil’s products.

- b) **ExxonMobil’s other greenwashing representations in advertisements mislead Massachusetts consumers by falsely representing that ExxonMobil is a leader in developing clean energy, such as algae biofuels, when ExxonMobil is increasing its production of fossil fuels, spends very little on clean energy research and development, and is opposing efforts to reduce emissions.**

699. ExxonMobil is running a series of paid full-page ads in print editions and posts in the electronic edition of *The New York Times*, produced with *The New York Times’* T Brand Studio, in which ExxonMobil misleadingly gushes about its efforts to develop energy production from alternate sources like algae and plant waste, efforts that pale in comparison to the investment ExxonMobil continues to make in fossil fuel production.

700. For example, ExxonMobil has ramped up production and reportedly is now the most active driller in the Permian Basin, the shale oil field located in western Texas and

southeastern New Mexico that yields low-cost oil in months, rather than the years required for larger offshore projects to begin producing crude.

701. As described in Section V.C above, ExxonMobil has invested billions of dollars into the development of massive Canadian oil sands projects, which are among the costliest and most polluting oil extraction projects in the world.

702. ExxonMobil has even attempted to greenwash the names of its oil sands projects in Canada, misleadingly naming several after animals living in the surrounding area, in the indigenous language of people native to that region. For example, one project is named “Maskwa,” after the Cree word for “bear.” ExxonMobil’s appropriation of these names attempts to falsely affiliate in the public’s mind an image of a wild animal and the culture of a people, whose traditions are associated with an ethic of care for the environment, with ExxonMobil’s environmentally destructive oil sands projects. In reality, the Canadian oil sands projects pollute water supplies on which local indigenous tribes rely and contribute to climate change that is threatening the existence of many species, likely including those after which ExxonMobil named its oil sands projects.

703. In its 2017 and 2018 Summary Annual Reports, ExxonMobil “highlights” multiple new and expanded fossil fuel extraction projects around the world, all of which produce substantial greenhouse gas emissions both directly through their extraction and indirectly through the use of the extracted resource.

704. Yet, ExxonMobil’s advertisements promoting its investment in algae and biofuels fail to mention the Company’s ongoing “business as usual” ramp up in global fossil fuel exploration, development, and production activities, including ExxonMobil’s ferocious expansion of efforts to develop “unconventional” fuels, including some of the most carbon-

intensive fuels. These ads constitute a highly effective greenwashing tactic, because they send the false and misleading message that ExxonMobil is working to *reduce* its greenhouse gas emissions, when in fact, the Company is increasing fossil fuel production, and its profitability turns on its sales of fossil fuels, which necessarily *increase* the greenhouse gas emissions that are driving dangerous climate change impacts.

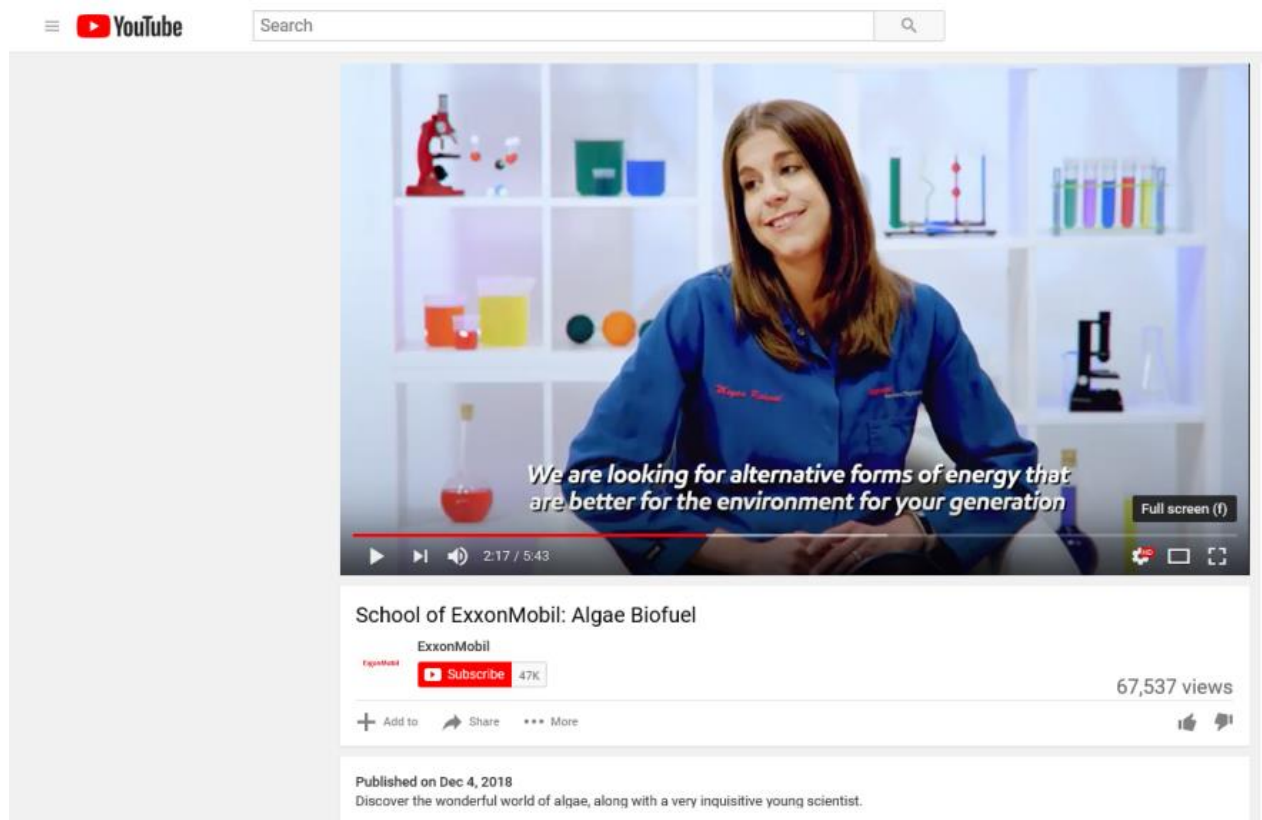
705. For example, ExxonMobil states in a print advertisement that ran in the New England edition of *The New York Times* distributed to Massachusetts consumers on December 18, 2018, with the tagline, “*That’s Unexpected Energy from ExxonMobil*”: “Making energy this way [from biofuels] could reduce greenhouse gases compared to traditional fossil fuels—pretty good for stuff that would otherwise go to waste” and “Cellulose . . . could be a major source of biofuel.”

706. In a post to the electronic edition of *The New York Times*, titled, “The Future of Energy? It May Come From Where You Least Expect: How scientists are tapping algae and plant waste to fuel a sustainable energy future,” ExxonMobil claims that the Company is “working to decrease our overall carbon footprint,” markets itself as an innovator in the development of alternative fuels, such as fuel from algae and from farm waste, and falsely represents itself as an environmentally responsible company, concluding the post with the statement: “**A Greener Energy Future. Literally.** *That’s Unexpected Energy.*” (Emphasis in original.)

707. In December 2018, ExxonMobil released a marketing video titled the “School of ExxonMobil: Algae Biofuel,” currently available on YouTube.⁷ The video features a female ExxonMobil researcher, surrounded by pastel-colored liquids in beakers and test tubes and

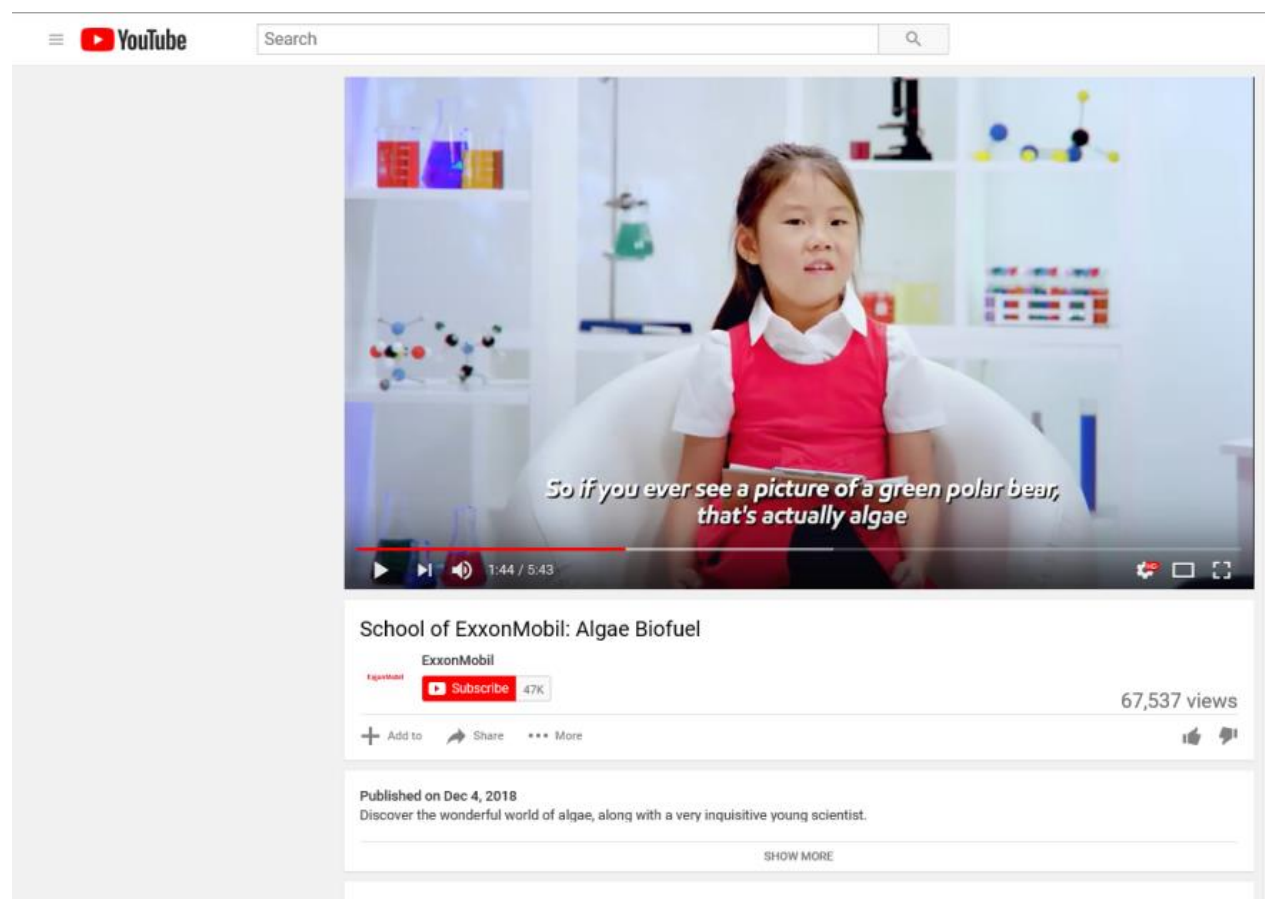
⁷ <https://www.youtube.com/watch?v=9IuAkMJqb7Y> (accessed October 24, 2019).

scientific instruments, explaining to a little girl how ExxonMobil is “looking for alternative forms of energy that are better for the environment for your generation.” The video, apparently targeted to parents who may be concerned about the impacts of climate change on their children’s futures, misleadingly represents ExxonMobil as a clean energy leader, when in fact, ExxonMobil is investing very little in so-called clean energy, and its central business—extracting, producing, refining, and marketing fossil fuels—threatens the futures of children around the world, as ExxonMobil has long known. Below is a still from the video.



708. At one point in the video, the ExxonMobil researcher explains to the little girl that algae live all over the world, including “in the north pole, they can even live in a polar bear’s fur.” The researcher continues, “[s]o if you ever see a picture of a green polar bear, that’s actually algae.” Here, the video, screenshot below, misleadingly invokes the imagery of polar bears, playfully festooned with ExxonMobil’s fuel of the future. But in reality, the climate

disruption caused by ExxonMobil's chief product is threatening polar bears' survival as a species. Polar bears were listed as threatened under the U.S. Endangered Species Act in 2008, due to ongoing loss of their sea ice habitat as a result of climate change, and scientists have recently confirmed that polar bears are actually starving due to climate change.



709. Current evidence suggests it would be prohibitively expensive to produce algae on a large scale, since cultivation requires massive amounts of land (to construct ponds) and fertilizer. Even the genetically modified strains it appears ExxonMobil is pursuing present serious technological hurdles to commercialization and high risk of environmental contamination should modified organisms escape. As of 2009, ExxonMobil had made a \$600 million investment in algae biofuels—a small fraction of the billions the Company invests annually in fossil fuels. In 2016, ExxonMobil earned \$198 billion in revenue; in 2017, ExxonMobil invested

one billion dollars in alternative energy research, including algae—about one-half of one percent of its 2016 annual revenue.

710. A 2019 report by InfluenceMap documents that ExxonMobil’s goal of producing 10,000 barrels of biofuel per day by 2025 would equate to only 0.2 percent of its current refinery capacity—what the report referred to as “a rounding error.”

711. Indeed, during an October 2017 meeting between ExxonMobil and Wellington, which was attended by ExxonMobil’s then-Vice President of Investor Relations and Secretary, Jeffrey Woodbury, Mr. Woodbury responded to questions regarding climate-driven risks to ExxonMobil by focusing on the Company’s algae biofuel research. A senior Wellington manager concluded that Mr. Woodbury’s response demonstrated an ongoing effort by the Company to avoid the issue of the climate risk it faces, and that the Company’s investment in advertising its algae research is a greenwashing effort to improve its image, and not one undertaken to truly address the risks posed by climate change to ExxonMobil’s business.

712. ExxonMobil’s misleading algae biofuels advertisements never allude to the fact that other proven, cost-effective alternatives to fossil fuels, including wind and solar power, are already in widespread use in the United States and providing competitively priced power.

713. In its advertising, ExxonMobil claims that it is “working to decrease our overall carbon footprint,” while, in fact, the Company continues its unabated, business-as-usual rapid exploration, development, and production of fossil fuel reserves, including its most carbon-intensive reserves, such as those from Canadian oil sands. The Company also deceptively asserts in its advertising that biofuel is “engine ready” when, in fact, its readiness is, at best, many years away. Greenwashing claims such as these mislead consumers about the actual climate impacts of

ExxonMobil's products, and help to create a marketing environment in which consumers also may be more easily misled by ExxonMobil's deceptive product advertising.

714. According to the 2019 InfluenceMap report, since the 2015 Paris Agreement, among the five largest publicly traded oil companies, ExxonMobil has led the pack with \$56 *million* in annual expenditures on climate-focused branding activities misleadingly geared to draw attention to its purported commitment to develop low carbon fuels, deceptively position itself as a technical expert on climate and climate change solutions, and acknowledge concern about climate change, while ignoring key strategies necessary to mitigate risk—such as rapidly transitioning away from fossil fuel use.

715. ExxonMobil's climate change greenwashing—reaching a fever pitch following the historic Paris Agreement—misleads Massachusetts consumers by falsely and deceptively representing ExxonMobil as supportive of ambitious action on climate change, when in fact, ExxonMobil has for decades staunchly resisted and opposed action to address climate change, thereby willfully delaying action to reduce the threat of harm to its consumers.

716. ExxonMobil's history of denial continues. Just last year, and contrary to its representations that it is committed to helping customers improve fuel economy and reduce emissions, ExxonMobil engaged in a secretive campaign to roll back fuel economy and emission standards for passenger vehicles that limit pollution and help consumers save fuel and money. As discussed in Section VI.B.1 above, ExxonMobil promotes its Synergy™ and “green” Mobil 1™ products with messaging that those products can help consumers reduce greenhouse gas emissions and use less fuel by improving fuel economy. And ExxonMobil is promoting its new Synergy Supreme+ as its “Best Fuel Ever,” because, ExxonMobil claims, it is twice as “clean,” for better gas mileage.

717. Likewise, in a section of ExxonMobil's 2014 *Energy and Climate* report titled, "What ExxonMobil is doing about climate change," ExxonMobil has represented that it was helping to improve consumer vehicle fuel economy and reduce greenhouse gas emissions from motor vehicles.

718. Yet, it appears that during 2018, as reported in *The New York Times*, ExxonMobil did just the opposite, secretly participating in a Facebook campaign to roll back federal fuel economy and vehicle emissions standards that would accomplish the very goals ExxonMobil represented that it was working to achieve—improving fuel economy, saving consumers money, and reducing greenhouse gas emissions. The Facebook campaign was coordinated by a fossil fuel and petrochemical manufacturers' trade group known as American Fuel and Petrochemical Manufacturers ("AFPM"). ExxonMobil is a member of AFPM, and AFPM's board includes representatives from ExxonMobil.

719. Facebook advertisements promoted by the campaign, including one rallying support for a "car freedom agenda," and one for "safer, cheaper cars that WE get to choose," failed to disclose that the advertisements were sponsored by AFPM, ExxonMobil, and other oil industry interests. Instead, they appeared to be sponsored by an organization identified only as Energy4US, which describes itself as a "coalition of consumers, businesses and workers" promoting affordable energy. The Energy4Us.org domain name appears to have been registered by AFPM in 2015.

720. The proposed rollback of the fuel economy and vehicle emissions standards sought by the campaign would increase greenhouse gas emissions in the United States by more than the amount many midsize countries emit in a single year.

721. ExxonMobil's representations to consumers that it is seeking to improve consumer fuel economy and reduce emissions, when in fact it has been engaging in a secretive campaign to roll back fuel economy and emissions standards that would achieve that goal, are deceptive.

722. According to the 2019 InfluenceMap report, ExxonMobil has spent about \$41 million annually since the Paris Agreement to oppose efforts to reduce greenhouse gas emissions.

c) ExxonMobil misleads Massachusetts consumers by greenwashing its reputation as an environmentally responsible corporate citizen through various public reports.

723. In 2002, ExxonMobil began to publish reports in which the Company aimed to present itself as socially responsible, and a "good corporate citizen."

724. ExxonMobil currently authors and publishes "Corporate Citizenship" and "Sustainability" reports, which it makes available on its website to its stakeholders, a group that ExxonMobil identifies as including its "customers." Touting its external engagement efforts, ExxonMobil recognizes that "[m]any people, organizations and communities are impacted directly by . . . our business" and tells readers that it "builds relationships with a diverse group of stakeholders through timely and transparent communication." ExxonMobil recognizes that transparency is one of the most material issues for sustainability performance and thus sustainability reporting.

725. ExxonMobil's "Corporate Citizenship" and "Sustainability" reports repeatedly obfuscate and greenwash ExxonMobil's contribution to climate change by making false and misleading statements about its efforts to address the problem and omitting its knowledge of the fact that its products cause climate change, which poses an extreme danger to all of

ExxonMobil's "stakeholders." For example, in ExxonMobil's 2013 Corporate Citizenship Report, the Company stated:

ExxonMobil is committed to addressing the key challenge of sustainable development – balancing economic growth, social development and environmental protection so future generations are not compromised by actions taken today. By designing our approach to corporate citizenship . . . we contribute to society's broader sustainability objectives and manage the impact of our operations on local economies, societies and the environment.

726. ExxonMobil did not disclose, however, that it has understood, for at least forty years, the extreme risk posed to those future generations by climate change that is caused by combustion of fossil fuels, ExxonMobil's chief product. Nor did ExxonMobil disclose that it had taken steps during that period to prevent that understanding from becoming public knowledge.

727. It did not disclose those facts even though it also recognized in that same report that its fuel and motor oil customers are concerned about their environmental impacts and are looking for products that, among other things, "reduce [greenhouse gas] emissions."

728. In that same 2013 report, ExxonMobil represented it "view[s] effective risk management and a commitment to safety as business imperatives" and that "[t]he safety and health of our employees, contractors and communities are at the core of our commitment to integrity." ExxonMobil heralded its efforts to ensure worker safety ("Nobody Gets Hurt") and process safety (including the prevention of "the uncontrolled release of hydrocarbons") and its savvy approach to risk management, including risks associated with health and the environment.

729. Similarly, in its 2016 Corporate Citizenship Report, which features a number of color photographs of frogs, fish, and flowers, in a section addressing the Company's environmental performance, ExxonMobil claims that "ExxonMobil considers risks at every stage of development, and we continuously work to mitigate those risks and improve our environmental performance." The 2016 Corporate Citizenship Report describes the Company's

Operations Integrity Management System as a “management framework that helps put our Corporate Environment Policy into action and establishes common worldwide expectations for addressing risks inherent in our business, including environmental risks” and the Company’s “approach” as “grounded in a scientific understanding of the environmental impacts of our operations and a commitment to develop, maintain and operate projects and decommission assets using appropriate standards.”

730. The 2016 Corporate Citizenship Report does not reference Exxon’s early, climate change scientific research program, or the Company’s sophisticated internal scientific understanding of the potentially “catastrophic” impacts of climate change.

731. Rather, these reports are falsely and misleadingly silent on the fact that ExxonMobil’s core business causes climate change, which in turn causes grave risks to human life and ecosystems and increasingly uninsurable risks to property, jeopardizing the safety of Massachusetts consumers, and the stability of communities across the United States and the world.

732. The rosy picture painted by ExxonMobil is contradicted by the extremely urgent warnings issued in 2018 by the U.S. government and the United Nations, as set forth above in Section IV.C. The IPCC’s October 2018 report made clear the deception in ExxonMobil’s refrain that “nothing is more important” to ExxonMobil than safety, including of its customers, and the Company’s goal of “Nobody Gets Hurt”; the United Nations observed that governments would need to make “rapid, far-reaching and unprecedented changes in all aspects of society” to avoid disaster from climate change, predicted that the Earth will reach the crucial threshold of 1.5 degrees C (2.7 degrees F) above pre-industrial levels by as early as 2030, and underscored

that the world faces risks of extreme drought, wildfires, floods, and food shortages for hundreds of millions of people as a result of climate change.

733. In its 2016 Corporate Citizenship Report, ExxonMobil stated that “[w]e conduct our business in a manner that is responsive to the environmental and economic needs of the communities in which we operate.” The 2017 ExxonMobil Corporate Sustainability Report represents that ExxonMobil is “committed to providing affordable energy to empower human progress and improve standards of living while advancing effective solutions to address climate change.”

734. ExxonMobil’s representations are overall false and misleading because ExxonMobil fails to disclose anticipated global economic and other losses associated with climate change, as discussed in Sections IV.C and V.B above. As recounted in Section IV.B above, Exxon’s own expert advised it decades ago that a 2.5 degree C (4.5 degrees F) rise in global average temperatures by 2038, would have “major economic consequences,” and would “bring[] world economic growth to a halt,” and that a projected increase of 5 degrees C by 2067, (9 degrees F), if emissions continued unabated, would have “globally catastrophic effects.”

735. In the 2017 ExxonMobil Corporate Sustainability Report, ExxonMobil also misrepresents its history with regard to the Company’s climate change research:

Our scientists have been involved in climate change research and related policy analysis for more than 35 years, resulting in hundreds of publicly available documents on climate-related topics, including more than 50 peer-reviewed publications.

736. ExxonMobil’s 2014 *Energy and Climate* publication and its 2019 Energy and Carbon Summary make similar statements regarding the Company’s climate change research.

737. These statements deceptively bury ExxonMobil’s history of climate deception, described above, and omit any mention of Exxon’s internal knowledge—developed decades

ago—of the role its fossil fuel products play in causing climate change, and the existential risks posed to human communities and the environment by unabated greenhouse gas emissions caused by the use of fossil fuels.

738. For example, ExxonMobil’s misleading statement proclaiming itself to be a climate science leader fails to disclose that, while ExxonMobil was undertaking that scientific research, it was cynically participating in and spending millions of dollars on campaigns to attack the very climate science ExxonMobil was helping to develop. The Company’s goal was to cause the public and stakeholders to *doubt* the science of climate change, including, for example, by its lead role in the Global Climate Science Communications Team, which, despite Exxon’s longstanding scientific knowledge to the contrary, claimed that it was “not known for sure whether (a) climate change actually is occurring, or (b) if it is, whether humans really have any influence on it.”

739. ExxonMobil’s statements regarding its climate science leadership also fail to disclose that, for Exxon and its Global Climate Science Communications Team collaborators, “[v]ictory,” would “be achieved when average citizens ‘understand’ (recognize) uncertainties in climate science,” and “recognition of uncertainty becomes part of the ‘conventional wisdom’”—in other words, when the public and decisionmakers start to doubt the scientific basis for warnings about the dire threat of climate change.

740. Further, the peer-reviewed and other climate change research publications referenced and linked in ExxonMobil’s 2017 Corporate Sustainability Report are not, as ExxonMobil claims, “publicly available.” Indeed, most of the papers are blocked from public access by paywalls, available only after payment of a fee. It is likely that these papers, many of

them published decades ago, were similarly available at that time only through costly journal subscriptions.

741. The publications are also extremely technical in nature and would not be comprehensible to a lay reader. As a result, even for those publications that may be “publicly available,” the content would not be accessible to the general public.

742. The peer-reviewed and other climate change research publications referenced in ExxonMobil’s 2017 Corporate Sustainability Report do not disclose ExxonMobil’s internal knowledge of the harms caused by climate change and the role of ExxonMobil’s fossil fuel products in causing that harm. Indeed, the papers are silent on what ExxonMobil knew at the time to be the “catastrophic” risks of climate change to human populations and the environment.

743. Instead, the publications focus, in the main, on very narrow technical topics related to emissions mitigation, such as carbon sequestration and geoengineering—notably, strategies that would, if feasible, permit ExxonMobil to continue business-as-usual fossil fuel exploration, production, and sales. The publications tend to focus on the need to reduce carbon dioxide emissions to the atmosphere, rarely mentioning the need to shift away from use of ExxonMobil’s fossil fuel products, despite Exxon’s internal knowledge that such a shift would be necessary to avoid dangerous warming.

C. Information Regarding the Role of ExxonMobil’s Fossil Fuel Products in Causing Climate Change Is Material to Consumers’ Purchasing Decisions, and ExxonMobil’s Deceptive Statements and Omissions to Consumers Have Distorted the Market for Energy Products and Technologies, Including Its Own.

744. Consumer use of fossil fuel products, most commonly by driving gasoline-powered internal combustion engine vehicles, is one of the greatest contributors to climate change.

745. According to the Environmental Protection Agency, as of 2016, the transportation sector generated the largest share (about 28.5 percent) of U.S. greenhouse gas emissions, primarily from burning fossil fuels for cars, trucks, ships, trains, and planes. In that same year, in Massachusetts, greenhouse gas emissions from the transportation sector were an even larger share of the total: about 43 percent.

746. Many Massachusetts consumers, however, are unaware of the magnitude of the threat to human communities and the environment posed by unabated use of fossil fuels and the relationship between their purchasing behavior and climate change.

747. By misleading consumers about the purported climate benefits of using ExxonMobil's Synergy™ and "green" Mobil 1™ products and by failing to disclose to consumers the climate risks associated with their purchase and use of those products, ExxonMobil is intentionally depriving consumers of information about the consequences of their purchasing decisions—information ExxonMobil knows would influence both public perception of its products and consumer purchasing behavior.

748. In addition to misleading consumers and depriving them of vital information regarding the danger associated with the production and use of its Synergy™ and "green" Mobil 1™ products, ExxonMobil seeks to mislead consumers, and induce purchases, with greenwashing designed to represent ExxonMobil as an environmentally responsible company developing innovative green technologies and products, when in reality, ExxonMobil's business model centers on developing, producing, and selling more of the very fossil fuels responsible for increasingly dangerous climate change.

749. ExxonMobil's conduct is akin to that of the tobacco companies that had internal knowledge of the high health risks associated with smoking, yet intentionally withheld that

information from consumers, all while sowing doubt about the link between smoking and lung cancer and other smoking-related health harms, and holding themselves out as good corporate citizens making science-driven decisions.

750. As in the case of cigarettes, history demonstrates that when consumers are made aware of the harmful effects or qualities of the products they purchase, they often choose not to purchase them or to reduce their purchases. This phenomenon holds especially true when products have been shown to harm public health and/or the environment.

751. For another example, consumers responded swiftly to findings that the use of products like hairsprays and deodorants with chlorofluorocarbon (“CFC”) containing aerosols were depleting the earth’s protective ozone layer by purchasing substitutes for CFC-containing products.

752. In addition to reducing and avoiding purchases, informed consumers will also contribute towards solving environmental problems by rewarding companies that they perceive to be developing “green” or more environmentally friendly products. Studies show that: almost a third of Americans said that they had, over the prior year, rewarded companies taking steps to reduce global warming by buying products made by those companies; consumers with better access to information about the greenhouse gas emissions associated with their purchasing decisions desired to reduce their carbon footprints and felt greater accountability for how their product use impacted carbon emissions; and people change their views when better informed about issues like climate change.

753. The oil industry formally recognizes climate change as material to both oil companies and consumers. The International Petroleum Industry Environmental Conservation Association (“IPIECA”), of which ExxonMobil is a member, defines “material issues” as those

that, “in the view of both the company’s management and its external stakeholders, affect the company’s performance or strategy and/or inform stakeholder assessments or decisions about the company.” According to IPIECA, “[c]ertain risks and their associated impacts such as those associated with climate change and safety are likely to remain material and be treated prominently every year in the sustainability report”

754. ExxonMobil has publicly acknowledged that climate change is a material issue to its business and its stakeholders. For example, in its 2016 Corporate Citizenship Report, ExxonMobil represented that a “key step” in developing the report was ensuring that “the content reflects ExxonMobil’s most material issues,” and that, “[a]ccording to the IPIECA, material issues for sustainability reporting are those that, in the view of both the company’s management and its external stakeholders, have the potential to affect sustainability performance significantly.” The material issues identified by ExxonMobil in its 2016 Corporate Citizenship Report included “[m]anaging climate change risks [by]...[m]itigating emissions.”

755. ExxonMobil’s misleading representations concerning the purported greenhouse gas emissions reductions benefits associated with consumer use of its Synergy™ and “green” Mobil 1™ products are material, because they have the capacity, tendency, or effect of deceiving Massachusetts consumers, thereby influencing their purchasing decisions.

756. Information—which ExxonMobil knows and has failed to disclose—regarding the dangerous climate effects of producing and using ExxonMobil’s fossil fuel products is material because it has the capacity, tendency, or effect of deceiving Massachusetts consumers, and thereby influencing their purchasing decisions.

757. If ExxonMobil fully disclosed the risks to consumers and their families associated with the routine use of its fossil fuel products, and the fact that, for decades, ExxonMobil hid

those risks and tried to cast doubt on the climate science it had helped to develop—such disclosure would reasonably be expected to cause a consumer to act differently than she may otherwise have acted. For example, a consumer might purchase fewer ExxonMobil fossil fuel products, or none. Consumers might opt to avoid or combine car travel trips; carpool; change driving habits; switch to more fuel-efficient vehicles, hybrid vehicles, or electric vehicles; use a car-sharing service; seek transportation alternatives all or some of the time, if available (e.g., public transportation, biking, or walking); or any combination of those choices. Some might opt to forgo driving, eliminating altogether their use of ExxonMobil products.

758. Similarly, even those consumers who may elect to continue to purchase the same amounts and types of fossil fuel products might, if they were aware of ExxonMobil's egregious deception, prefer to purchase those products from oil companies other than ExxonMobil; consumers' post-Valdez boycott of Exxon, and other consumer boycotts, demonstrate that consumers frequently opt to "vote" with their dollars when corporate malfeasance comes to light.

759. ExxonMobil's failure to disclose to consumers its knowledge regarding the role of its fossil fuel products in causing dangerous climate change therefore constitutes a material omission.

760. ExxonMobil's misleading greenwashing presents a false image of ExxonMobil as a clean energy innovator, a trusted energy expert developing the solutions to climate change, and a corporate leader dedicated to taking meaningful action to address climate change. ExxonMobil's false and misleading greenwashing representations are material, because they have the capacity, tendency, or effect of deceiving Massachusetts consumers, and thereby influencing their purchasing decisions.

761. ExxonMobil's failure to disclose to Massachusetts consumers its longstanding knowledge that the production and use of ExxonMobil's fossil fuel products are a leading source of the dangerous carbon pollution that is causing deadly climate disruption has distorted the energy markets and markets for vehicles and low carbon transportation fuels.

762. When one party to a transaction has more information than the other party, a market failure, or distortion occurs. The problem of asymmetrical information, as it is referred to by economists, is that transactions are made on the basis of incomplete information. By failing and refusing to provide to Massachusetts consumers material information regarding ExxonMobil's knowledge of the role of fossil fuels in causing climate change, and by misleadingly marketing its SynergyTM gasoline and "green" Mobil 1TM motor oil products as reducing transportation sector emissions, ExxonMobil has distorted the markets for energy, vehicles, and transportation fuels.

763. Increased consumer awareness of the role of pesticides in harming human health, worker health, and the environment has spurred a burgeoning market for food grown organically and without the use of pesticides—with access to information about how their food was grown, consumers demanded healthier choices, and the market responded.

764. ExxonMobil's deceptive and misleading product marketing and promotion and its greenwashing and climate denial campaigns reduced market transparency, ensuring that consumers entering into transactions to purchase ExxonMobil products or products that use ExxonMobil products would not have access to the same information ExxonMobil had, and, as a result, consumer demand for technologies like electric vehicles and clean energy was dampened, and delayed.

765. ExxonMobil's market-distorting deception delayed the advancement of the technologies needed to decarbonize the transportation and electric power sectors, despite the fact that these technologies could have been market-ready decades ago. Indeed, following the 1970s oil crisis, Exxon developed some of the earliest electric hybrid vehicle technology. In 1978, Exxon began promoting a diesel-electric hybrid powerpack that was "ready now" for broad adoption and was specifically designed to be used with standard-sized automobiles. Exxon marketed the new technology as capable of meeting new federal fuel economy standards that would go into effect in 1985.

766. ExxonMobil's deceptive misrepresentations to consumers are thus unconscionable for the independent reason that they contribute to greater climatic warming from new fossil fuel investments and undermine the pace of deployment of clean energy sources.

767. ExxonMobil's deceptive representations and omissions in its communications with consumers, as with its omissions and misrepresentations to investors, had the effect of delaying meaningful action to address climate change by perpetuating reliance on fossil fuels around the world and the consequent greenhouse gas emissions as the projects it is financing now continue to operate in the future. In this regard, ExxonMobil's false and deceptive statements and omissions to Massachusetts investors and consumers are yet another means of avoiding the Company's reckoning with the clarion call of the science the Company has long understood: that the world must swiftly shift away from fossil fuel energy or else face catastrophic impacts to humankind and the environment.

VII. CAUSES OF ACTION

ACTS OR PRACTICES **IN VIOLATION OF THE MASSACHUSETTS CONSUMER PROTECTION ACT**

768. The Commonwealth repeats and realleges the preceding paragraphs of this Complaint.

769. Chapter 93A makes unlawful “deceptive acts or practices in the conduct of any trade or commerce.” G.L. c. 93A, § 2(a).

770. Chapter 93A empowers the Attorney General to seek to enjoin deceptive acts or practices, obtain restitution for consumers, impose civil penalties, and recover reasonable investigation and litigation costs, including reasonable attorneys’ fees. G.L. c. 93A, § 4.

771. Chapter 93A also authorizes the Attorney General to “make rules and regulations interpreting the provisions of subsection 2(a) of this chapter.” G.L. c. 93A, § 2(c).

772. The Attorney General has duly promulgated regulations that establish enforceable standards for whether conduct, terminology, or representations involve acts or practices in violation of G.L. c. 93A, § 2(a).

773. The Attorney General’s regulations, at 940 C.M.R. § 3.02(2), prohibit any “statement or illustration . . . in any advertisement which creates a false impression of the grade, quality, make, value, currency of model, size, color, usability, or origin of the product offered, or which may otherwise misrepresent the product in such a manner that later, on disclosure of the true facts, there is a likelihood that the buyer may be switched from the advertised product to another.”

774. The Attorney General’s regulations, at 940 C.M.R. § 3.05(1), prohibit misrepresentations that “directly, or by implication, or by failure to adequately disclose additional relevant information, ha[ve] the capacity or tendency or effect of deceiving buyers or

prospective buyers in any material respect,” including as to “[the] manner or time of performance, safety, strength, condition, or life expectancy of such product . . . or the utility of such product or any part thereof, or the benefit to be derived from the use thereof.”

775. The Attorney General’s regulations, at 940 C.M.R. § 3.16, provide that an act or practice is a violation of G.L. c. 93A, § 2, if:

(1) It is oppressive or otherwise unconscionable in any respect; or

(2) Any person or other legal entity subject to this act fails to disclose to a buyer or prospective buyer any fact, the disclosure of which may have influenced the buyer or prospective buyer not to enter into the transaction[.]

776. For retail advertising, the Attorney General’s regulations, 940 C.M.R. § 6.03(1)–(2), assign “responsibility for truthful and nondeceptive advertising” to “sellers,” who “shall not use advertisements which are untrue, misleading, deceptive [or] fraudulent”

777. In this regard, the Attorney General’s regulations provide that “[a]n advertisement as a whole may be unfair or deceptive although each representation separately construed is literally true,” 940 C.M.R. § 6.03(3), and “[a]n unfair or deceptive representation may result not only from direct representations and the reasonable inferences they create, but from the seller’s omitting or obscuring a material fact,” 940 C.M.R. § 6.03(4).

778. The Attorney General’s regulations, 940 C.M.R. § 6.04, provide that “[i]t is an unfair or deceptive act” for a seller to “make any material representation of fact in an advertisement if the seller knows or should know that the material representation is false or misleading or has the tendency or capacity to be misleading,” and to “fail to clearly and conspicuously disclose in any advertisement any material representation, the omission of which would have the tendency or capacity to mislead reasonable buyers or prospective buyers.”

779. As the Supreme Judicial Court has stated, advertising need not be totally false in order to be found deceptive under Chapter 93A; advertising is unlawful if it consists of a half-truth and may even be true as a literal matter but still create an overall misleading impression through failure to disclose material information.⁸

780. Pursuant to G.L. c. 93A, § 4, the prohibitions in Chapter 93A apply to deceptive acts and practices concerning the marketing and sale of securities.

FIRST CAUSE OF ACTION

ExxonMobil Has Misrepresented and Failed to Disclose Material Facts Regarding Systemic Climate Change Risks

781. The Commonwealth repeats and realleges the preceding paragraphs of this Complaint.

782. ExxonMobil is, and at all relevant times was, a “person” engaged in “trade or commerce” in Massachusetts as defined and used in Chapter 93A, G.L. c. 93A, §§ 1(a)-(b) and 2, including in its sale and/or marketing of ExxonMobil securities to Massachusetts investors.

783. In its climate risk disclosures, including *Managing the Risks, Energy and Climate*, its Outlook for Energy, and its Energy and Carbon Summary, ExxonMobil misrepresented, omitted, obscured, and failed to disclose to Massachusetts investors material facts regarding the risks posed by climate change to humanity, ecological systems, society, the global economy, the world’s financial systems and markets, the fossil fuel sector, and ExxonMobil’s business, as well as the role of ExxonMobil’s products in exacerbating those risks, and ExxonMobil’s plans, if any, to respond to those risks (together, “systemic risk misrepresentations and omissions”).

⁸ *Exxon Mobil Corp. v. Attorney General*, 479 Mass. 312, 320 (2018).

784. In its ongoing communications with Massachusetts investors, ExxonMobil's systemic risk misrepresentations and omissions are continuing.

785. The systemic risk misrepresentations and omissions are misleading to Massachusetts investors and are material to Massachusetts investors' decisions regarding the purchase, sale, retention, and pricing of ExxonMobil securities.

786. Through the systemic risk misrepresentations and omissions, ExxonMobil has misrepresented, omitted, or obscured, and is misrepresenting, omitting, or obscuring, material facts about climate change risks, the disclosure of which would influence the decisions of Massachusetts investors or prospective investors to purchase, sell, retain, or price ExxonMobil securities, in a manner that is misleading and/or has the tendency or capacity to be misleading in violation of Chapter 93A and the Attorney General's regulations.

787. ExxonMobil's systemic risk misrepresentations and omissions misleadingly overstate the value of ExxonMobil's securities to Massachusetts investors in violation of Chapter 93A and the Attorney General's regulations.

788. ExxonMobil knows and knew that its systemic risk misrepresentations and omissions were and are deceptive, and those misrepresentations and omissions are and were willful.

789. By its deceptive systemic risk misrepresentations and omissions, ExxonMobil has violated and is violating Chapter 93A and the Attorney General's regulations, including 940 C.M.R. §§ 3.16(1) and 3.16(2).

790. The deceptive nature of ExxonMobil's systemic risk misrepresentations and omissions is compounded by the Company's long history of intentionally sowing doubt and confusion in the minds of investors about the link between fossil fuel use and climate change.

791. Since at least 2012, ExxonMobil's conduct and practices with respect to Massachusetts investors, as alleged in this Complaint, have been and are unlawful under Chapter 93A, G.L. c. 93A, § 2, and these proceedings are in the public interest.

792. G.L. c. 93A, § 4, provides that the Court may issue injunctions to restrain acts and practices that are unlawful under Chapter 93A and, on the facts alleged in this Complaint, orders to impose civil penalties of up to \$5,000 for each violation, and for the payment of the reasonable costs of investigation and litigation of each such violation, including reasonable attorneys' fees. For the purposes of calculating penalties, each materially false, deceptive, or misleading statement to a Massachusetts investor and each sale of securities to a Massachusetts investor constitutes a separate violation.

793. The Commonwealth seeks such injunctive relief as may be determined to be appropriate in order to cease ExxonMobil's unlawful conduct, and imposition of civil penalties, together with the reasonable costs of the Commonwealth's investigation and litigation, including reasonable attorney's fees.

SECOND CAUSE OF ACTION

ExxonMobil Made Materially False and Misleading Statements to Massachusetts Investors Regarding Its Use of a Proxy Cost of Carbon

794. The Commonwealth repeats and realleges the preceding paragraphs of this Complaint.

795. ExxonMobil has made material misrepresentations to Massachusetts investors about the use of proxy costs in its investment decisions, business planning, reserves calculations, impairment evaluations, and demand projections (together, "proxy cost misrepresentations").

796. Because its internal practices deviated from its proxy cost misrepresentations, including in certain respects in violation of GAAP, ExxonMobil's proxy cost misrepresentations

were false or misleading, and/or had the tendency or capacity to be misleading, in violation of Chapter 93A and the Attorney General's regulations.

797. The proxy cost misrepresentations were misleading to Massachusetts investors and were material to Massachusetts investors' decisions regarding the purchase, sale, retention, and pricing of ExxonMobil securities.

798. In the course of the proxy cost misrepresentations, ExxonMobil has failed to disclose material facts regarding its actual use of proxy costs of carbon, the disclosure of which would have influenced the decisions of Massachusetts investors or prospective investors to purchase, sell, retain, or price ExxonMobil securities, in violation of Chapter 93A and the Attorney General's regulations.

799. Through the proxy cost misrepresentations, ExxonMobil has omitted or obscured material facts about how it was internalizing, valuing, or accounting for the risks of climate change-related costs to its businesses and assets, including the potential costs of climate regulation for its operations and product sales, in a manner that was false or misleading and/or had the tendency or capacity to be misleading in violation of Chapter 93A and the Attorney General's regulations.

800. ExxonMobil's proxy cost misrepresentations have had the effect of overstating the valuation of a material portion of ExxonMobil's upstream assets, including without limitation its Canadian oil sands and North American natural gas holdings, to Massachusetts investors, which in turn misleadingly have overstated the value of ExxonMobil's securities to Massachusetts investors in violation of Chapter 93A and the Attorney General's regulations.

801. ExxonMobil knew that its proxy cost misrepresentations were deceptive, and those misrepresentations were willful.

802. By its deceptive proxy cost misrepresentations, ExxonMobil violated G.L. c. 93A and the Attorney General's regulations, including 940 C.M.R. §§ 3.16(1) and 3.16(2).

803. The deceptive nature of ExxonMobil's proxy cost misrepresentations is compounded by the Company's long history of intentionally sowing doubt and confusion in the minds of investors about the link between fossil fuel use and climate change.

804. Since at least 2012, ExxonMobil's conduct and practices with respect to Massachusetts investors, as alleged in this Complaint, have been and are unlawful under Chapter 93A, G.L. c. 93A, § 2, and these proceedings are in the public interest.

805. G.L. c. 93A, § 4, provides that the Court may issue injunctions to restrain acts and practices that are unlawful under Chapter 93A and, on the facts alleged in this Complaint, orders to impose civil penalties of up to \$5,000 for each violation, and for the payment of the reasonable costs of investigation and litigation of each such violation, including reasonable attorneys' fees. For the purposes of calculating penalties, each materially false, deceptive, or misleading statement to a Massachusetts investor and each sale of securities to a Massachusetts investor constitutes a separate violation.

806. The Commonwealth seeks such injunctive relief as may be determined to be appropriate in order to cease ExxonMobil's unlawful conduct, and imposition of civil penalties, together with the reasonable costs of the Commonwealth's investigation and litigation, including reasonable attorney's fees.

THIRD CAUSE OF ACTION

ExxonMobil Has Deceived Massachusetts Consumers by Misrepresenting the Purported Environmental Benefit of Using Its Synergy™ and “Green” Mobil 1™ Products and Failing to Disclose the Risks of Climate Change Caused by Its Fossil Fuel Products.

807. The Commonwealth repeats and realleges the preceding paragraphs of this Complaint.

808. ExxonMobil is, and at all relevant times was, a “person” engaged in “trade or commerce” in Massachusetts as defined and used in Chapter 93A, G.L. c. 93A, §§ 1(a)-(b), 2, including the manufacturing, marketing, sale, distribution, and advertising of ExxonMobil fossil fuel products and services to Massachusetts consumers.

809. ExxonMobil markets and “advertises” and is a “seller” of its fossil fuel “products” and services through numerous channels in Massachusetts, within the meaning of those terms under the Attorney General’s regulations, 940 C.M.R. §§ 3.01 and 6.01, and Chapter 93A.

810. ExxonMobil has had longstanding internal knowledge that consumers’ purchase and use of ExxonMobil fossil fuel products cause dangerous climate change, which threatens the health, well-being, and property of Massachusetts consumers, and the ecological systems necessary for human survival in Massachusetts and around the world.

811. ExxonMobil also has had longstanding internal knowledge that substantially curtailing the use of fossil fuels is necessary to stabilize the increase in global average temperature and reduce the risk of catastrophic climate change.

812. ExxonMobil makes deceptive representations in its advertising and promotional materials that the consumer use of its Synergy™ and “green” Mobil 1™ products reduces greenhouse gas emissions. Those representations create a misleading impression and are deceptive, and/or have the tendency or capacity to mislead and deceive, since ExxonMobil has

failed and continues to fail to disclose that consumer use of fossil fuels such as its Synergy™ and “green” Mobil 1™ fossil fuel products is a leading cause of climate change that endangers public health and consumer welfare and property.

813. In its marketing and sales of Synergy™ and “green” Mobil 1™ to Massachusetts consumers, ExxonMobil has failed, and continues to fail, to disclose in its advertisements and promotional materials that the development, refining, and consumer use of those products emit large volumes of greenhouse gases, which are causing global average temperatures to rise, destabilizing the global climate system, and endangering human communities. These omissions relate directly to the use of ExxonMobil’s products and the effects of such use on climate change.

814. ExxonMobil’s misrepresentations and omissions regarding its products were and are material because they create an impression that is overall false and deceptive, and/or have the capacity, tendency, or effect of deceiving Massachusetts consumers, and thereby influencing their purchasing decisions, including decisions not to purchase.

815. The deceptive nature of ExxonMobil’s misrepresentations and omissions regarding its products is compounded by the Company’s long history of intentionally sowing doubt and confusion in the minds of consumers about the link between fossil fuel use and climate change.

816. ExxonMobil knows, knew, or should have known that the misrepresentations and omissions in its advertising and promotional materials directed to Massachusetts consumers were and are deceptive and/or had or have the tendency or capacity to deceive.

817. By its deceptive marketing schemes, ExxonMobil has violated Chapter 93A and the Attorney General's regulations, including 940 C.M.R. §§ 3.02(2), 3.05(1), 3.16(1), 3.16(2), 6.03(2), and 6.04(2).

818. Since at least 2012, ExxonMobil's conduct and practices with respect to Massachusetts consumers, as alleged in this Complaint, have been and are unlawful under Chapter 93A, G.L. c. 93A, § 2, and these proceedings are in the public interest.

819. G.L. c. 93A, § 4, provides that the Court may issue injunctions to restrain acts and practices that are unlawful under Chapter 93A and, where the Court finds that the defendant knew or should have known its conduct to be in violation of Chapter 93A, orders to impose civil penalties of up to \$5,000 for each violation, and for the payment of the reasonable costs of investigation and litigation of each such violation, including reasonable attorneys' fees. For the purposes of calculating penalties, each materially false, deceptive, or misleading statement to a Massachusetts consumer in connection with the sales of ExxonMobil's fossil fuel products in Massachusetts constitutes a separate violation.

820. The Commonwealth seeks such injunctive relief as may be determined to be appropriate in order to cease ExxonMobil's unlawful conduct, and imposition of civil penalties, together with the reasonable costs of the Commonwealth's investigation and litigation, including reasonable attorney's fees.

FOURTH CAUSE OF ACTION

ExxonMobil Has Deceived Massachusetts Consumers by Promoting False and Misleading Greenwashing Campaigns

821. The Commonwealth repeats and realleges the preceding paragraphs of this Complaint.

822. ExxonMobil's deceptive "greenwashing" campaigns are part of the Company's overall marketing strategy and target Massachusetts consumers with false and misleading messages about ExxonMobil's leadership in solving the problem of climate change, support of action to reduce greenhouse gas emissions, and focus on developing clean energy to "protect tomorrow today," and to protect future generations.

823. ExxonMobil's greenwashing misrepresentations and omissions created and continue to create an overall misleading impression by obscuring the extreme effects of climate change caused by the production and normal use of fossil fuel products, including ExxonMobil's Synergy™ and "green" Mobil 1™ products, and therefore fail to disclose material information to Massachusetts consumers.

824. ExxonMobil's greenwashing misrepresentations and omissions were and are material because they create an impression that is overall false and deceptive, and/or have the capacity, tendency, or effect of deceiving Massachusetts consumers, and thereby influencing their purchasing decisions, including decisions not to purchase.

825. The deceptive nature of ExxonMobil's greenwashing misrepresentations and omissions is compounded by the Company's long history of intentionally sowing doubt and confusion in the minds of consumers about the link between fossil fuel use and climate change.

826. ExxonMobil knows, knew, or should have known that the greenwashing misrepresentations and omissions in its advertising and promotional materials directed to Massachusetts consumers were and are deceptive and/or had or have the tendency or capacity to deceive.

827. By its deceptive marketing schemes, ExxonMobil has violated Chapter 93A and the Attorney General's regulations, including 940 C.M.R. §§ 3.02(2), 3.05(1), 3.16(1), 3.16(2), 6.03(2), and 6.04(2).

828. Since at least 2012, ExxonMobil's conduct and practices with respect to Massachusetts consumers, as alleged in this Complaint, have been and are unlawful under Chapter 93A, G.L. c. 93A, § 2, and these proceedings are in the public interest.

829. G.L. c. 93A, § 4, provides that the Court may issue injunctions to restrain acts and practices that are unlawful under Chapter 93A and, where the Court finds that the defendant knew or should have known its conduct to be in violation of Chapter 93A, orders to impose civil penalties of up to \$5,000 for each violation, and for the payment of the reasonable costs of investigation and litigation of each such violation, including reasonable attorneys' fees. For the purposes of calculating penalties, each materially false, deceptive, or misleading statement to a Massachusetts consumer in connection with the sales of ExxonMobil's fossil fuel products in Massachusetts constitutes a separate violation.

830. The Commonwealth seeks such injunctive relief as may be determined to be appropriate in order to cease ExxonMobil's unlawful conduct, and imposition of civil penalties, together with the reasonable costs of the Commonwealth's investigation and litigation, including reasonable attorney's fees.

VIII. REQUEST FOR RELIEF

The Commonwealth requests that the Court:

A. Determine that ExxonMobil has violated, and is continuing to violate, the Massachusetts Consumer Protection Act by committing deceptive practices against Massachusetts investors and consumers;

- B. Grant comprehensive injunctive relief;
- C. Award the Commonwealth penalties against ExxonMobil in the amount of \$5,000 for each separate violation of the Massachusetts Consumer Protection Act;
- D. Award the Commonwealth the costs of investigation and attorneys' fees; and
- E. Grant such additional relief as the Court deems just and proper.

Respectfully submitted,

COMMONWEALTH OF MASSACHUSETTS

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